DOCUMENT RESUME

ED 058 503 AA 000 807

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TITLE	Population, Enrollment, and Costs of Public Elementary and Secondary Education 1975-76 and 1980-81.
INSTITUTION	Simat, Heilleisen and Eichner, Inc.
SPONS AGENCY	President's Commission on School Finance, Washington, D.C.
PUB DATE	Nov 71
NOTE	331p.
EDRS PRICE	MF-$0.65 HC-$13.16
DESCRIPTORS	Construction Costs; *Demography; *Educational Finance; *Enrollment Projections; *Estimated Costs; Expenditure Per Student; Private Schools; *Public Education; Teacher Salaries; Teacher Supply and Demand

ABSTRACT

Enrollment projections for nursery, elementary, and secondary schools through 1981 are provided. Statistics are arranged according to school enrollment projections for 1975 and 1980; tentative enrollment projections in public and private schools; teacher supply and demand -- 1970, 1975, and 1980; current expenditure projections -- 1975-76 and 1980-81; and construction outlay and debt service projections for 1971-72 to 1980-81. An executive summary notes that costs to the public for financing public education depend on (1) the total number of children in eligible age groups, (2) the proportion of each age group enrolled, (3) the proportion attending public schools, and (4) the developments in instructional salaries and other expenditures. Projections indicate that the 14-19-year old population can be expected to increase 8.9 percent between 1970-71 and 1975-76; the public schools will increase their share of enrollments over private schools from 88.2 percent (grades 1-12) in 1970-71 to 92.6 percent in 1975-76, and to 95.0 percent in 1980-81; and total current expenditures for each public school pupil are expected to increase 4.8 percent per year between 1967-68 and 1975-76, and 2.8 percent between 1975-76 and 1980-80. (For related document, see ED 058 473.) (Author/IRT)

ED 058 503

Population, Enrollment, and Costs of Public Elementary and Secondary Education

1975-76 and 1980-81

PREPARED UNDER CONTRACT WITH
SIMAT, HEILLEISEN AND EICHNER, INC.

AA 000 807

Submitted to The President's Commission on School Finance

THIS IS ONE OF SEVERAL REPORTS PREPARED FOR THIS COMMISSION. TO AID IN OUR DELIBERATIONS, WE HAVE SOUGHT THE BEST QUALIFIED PEOPLE AND INSTITUTIONS TO CONDUCT THE MANY STUDY PROJECTS RELATING TO OUR BROAD MANDATE. COMMISSION STAFF MEMBERS HAVE ALSO PREPARED CERTAIN REPORTS.

WE ARE PUBLISHING THEM ALL SO THAT OTHERS MAY HAVE ACCESS TO THE SAME COMPREHENSIVE ANALYSIS OF THESE SUBJECTS THAT THE COMMISSION SOUGHT TO OBTAIN. IN OUR OWN FINAL REPORT WE WILL NOT BE ABLE TO ADDRESS IN DETAIL EVERY ASPECT OF EACH AREA STUDIED. BUT THOSE WHO SEEK ADDITIONAL INSIGHTS INTO THE COMPLEX PROBLEMS OF EDUCATION IN GENERAL AND SCHOOL FINANCE IN PARTICULAR WILL FIND MUCH CONTAINED IN THESE PROJECT REPORTS.

WE HAVE FOUND MUCH OF VALUE IN THEM FOR OUR OWN DELIBERATIONS. THE FACT THAT WE ARE NOW PUBLISHING THEM, HOWEVER, SHOULD IN NO SENSE BE VIEWED AS ENDORSEMENT OF ANY OR ALL OF THEIR FINDINGS AND CONCLUSIONS. THE COMMISSION HAS REVIEWED THIS REPORT AND THE OTHERS BUT HAS DRAWN ITS OWN CONCLUSIONS AND WILL OFFER ITS OWN RECOMMENDATIONS. THE FINAL REPORT OF THE COMMISSION MAY WELL BE AT VARIANCE WITH OR IN OPPOSITION TO VIEWS AND RECOMMENDATIONS CONTAINED IN THIS AND OTHER PROJECT REPORTS.

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A REPORT TO
THE PRESIDENT'S COMMISSION ON SCHOOL FINANCE

POPULATION, ENROLLMENT, AND COSTS OF PUBLIC ELEMENTARY AND SECONDARY EDUCATION 1975-76 AND 1980-81

by

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We gratefully acknowledge the assistance of the following.

The enrollment estimates in this report were prepared with the assistance of Dr. A.J. Jaffe, Director, Bureau of Applied Social Research, Columbia University. Dr. Robert Wolfson, Professor of Economics, Syracuse University, consulted on the cost estimating methodology.

Preliminary investigation of costs were carried out by Mr. Charles Kurth, Senior Associate, Simat, Helliesen and Eichner, Inc.

Miss Karen Tammany assisted the researchers in all phases of the project. Final editing, typing and compilation of this report was supervised by Mrs. Nora Lippiatt.

Mr. Fred Taylor and Miss Nancy Bradstreet, Research Associates at Simat, Helliesen and Eichner, Inc. provided the statistical and clerical assistance in developing the population and enrollment estimates.

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EXECUTIVE SUMMARY

POPULATION, ENROLLMENT, AND COSTS OF PUBLIC ELEMENTARY AND SECONDARY EDUCATION 1975-76 AND 1980-81

November 1971

POPULATION, ENROLLMENT, AND COSTS OF PUBLIC ELEMENTARY AND SECONDARY EDUCATION 1975-76 AND 1980-81

The costs incurred by the public sector to finance public elementary and secondary education will depend upon:

1. The total number of children in eligible age groups;
2. The proportion of each age group enrolled;
3. The proportion attending public schools; and
4. Developments in instructional salaries and other expenditures.

Total number of children

There is little uncertainty about the number of children who will be age 10 or over in 1980. They have been born, and their number may be affected only by the immigration and emigration rates.

The number of children under age 10 will depend upon the birth rate during this decade. The U.S. Bureau of the Census has published two projections of the future population, the so-called Series C and Series E. Series C projections are higher than Series E.

In summary, the number of children three to five years old in 1975-76, the primary nursery and kindergarten group, may be expected to number 102 per cent of the three to five year old population in 1970-71 and 120 per cent in 1980-81 if Series C projections turn out to represent birth rates in the 1970's. If the Series E projection is the more realistic one, the percentage of this age group in 1975-76 compared to the 1970-71 total would be 92 per cent. In 1980-81 the three to five year olds would number 101 per cent compared to 1970-71. The difference in the numbers is 1.1 million in 1975-76, and 2.1 million in 1980-81.

For the elementary school age group, 6 to 13, projections C and E are much closer together. In 1975-76 the estimate is 94 per cent of 1970-71 population for both projections C and E. In 1980-81 the relationship of estimated population to that of 1970-71 is 91 per cent for projection C, and 85 per cent for projection E.

There is no difference between projections C and E for the 14 to 19 year old population. It is expected to increase by 8.9 per cent between 1970-71 and 1975-76 and remain at that level after that date.

Enrollment rates

While substantially the whole of the eligible age group is likely to be enrolled in elementary school, there is some uncertainty about the future course of enrollments in both ends of the elementary and secondary spectrum. In the case of nursery and kindergarten enrollments this study has projected increases in enrollments of 1.0 million between 1975-76 and 1970-71, and further increases of 3.1 million between 1975-76 and 1980-81, based on the Series E projection. Total enrollments are thus projected to grow from 3.8 million in 1970-71 to 4.8 million in 1975-76 and 8.0 million in 1980-81. If present attendance rates were to be projected to those years, enrollments would be only 72 per cent in 1975-76 and 48 per cent in 1980-81.

In the secondary sector, these projections foresee increased public enrollments of 4.3 million by 1980-81 to bring them to 20.8 million. These projections are in line with past developments. In 1960, 54.4 per cent of the 14 to 19 year old group was enrolled in grades 9 through 12. In 1970 the percentage had increased to 63.4. By 1980 it is expected to increase to 68.3 per cent. The U.S.O.E. expects secondary enrollments to be 1.3 million less in 1975-76 and 2 million less in 1980-81. The assumption implicit in their projection is that attendance rates will hardly change between now and 1980.

Proportion attending public school

The share of public school enrollments was projected to increase quite substantially in the course of the next 10 years. The share of public schools in grades one through 12 was estimated at 88.2 per cent in 1970-71, 92.6 per cent in 1975-76, and 95.0 per cent in 1980-81.

When these projections were prepared, they showed much faster declines in enrollments of private schools than those published by U.S.O.E. Since then U.S.O.E. changed their projections, but only slightly. For 1975-76, U.S.O.E. now estimates 6.6 million students as contrasted to 5.4 million in this study. Their estimates have been reduced by .2 million from previously published projections, mostly due to reductions in grades one through seven.

The differences in the assumptions about enrollments in nursery, kindergarten, and high school, result in higher projections of enrollment by this study compared to U.S.O.E. They are 2.7 million higher in 1975-76 and 1.6 million more in 1980-81, i.e., 6 per cent in the earlier year and 3 per cent in the later year.

Projections of current expenditures

The projections of costs presented to the Commission were based on two types of estimates:

(1) Instructional costs, which account for roughly two-thirds of the outlays of the schools, were projected on the basis of an analysis of (a) supply and demand for professionals, especially teachers; (b) relative salaries of teachers, supervisory, non-supervisory non-professional personnel; (c) age distributions and educational attainment of teachers; and (d) trends in pupil-staff ratios for the past 10 years.

(2) The other current expenditures were estimated by trending per pupil expenditure, or other appropriate variables for that purpose. It was then possible to calculate changes in costs due to the increase in component costs, as well as those changes due to price developments, based upon the divergence of the appropriate index from the cost-of-living index.

These costs were scaled for each region and type of residence based on the results of 1967-68 and 1968-69 Elementary-Secondary General Information Survey (ELSEGIS), conducted by the U.S. Office of Education.

The cost per pupil for instructional expenditure is expected to increase by 5.2 per cent a year in constant prices from 1967-68 to 1975-76 and 2.9 per cent from 1975-76 to 1980-81.

Total current expenditures per pupil of public elementary and secondary education are expected to increase 4.8 per cent a year between 1967-68 and 1975-76, and 2.8 per cent between 1975-76 and 1980-81. On a global basis the increases are from $26.4 billion in 1967-68 to $41.4 billion in 1975-76, and $47.6 billion in 1980-81, an increase at the rate of 5.8 per cent per year between 1967-68 and 1975-80, and at 2.8 per cent between 1975-76 and 1980-81

CONSTRUCTION AND DEBT SERVICE

Construction

The projections of the construction needs were based upon estimated future enrollments and the construction experience of the late 1960's. In each year from 1967 to 1970 in addition to expansion needs, about 2.5 per cent of all public elementary and 3.0 per cent of secondary pupil space, were replaced (renovated or retired).

The estimates for 1971-80 are based on (1) the average replacement rates above, and (2) a "catch-up" allowance for those areas which lagged in replacing facilities during the late 1960's.

The projected construction outlays are the product of (1) replacement rates, (2) provision for enrollment growth, as appropriate, and (3) an average unit cost derived from the 1967-70 experience. The projections anticipate more building in central city districts, suburban districts in the South and West, and rural districts in the South than occurred in the late 1960's. Total costs in constant prices are expected to decline from $3.5 billion in 1967-68 to $3.3 billion and $3.4 billion in 1975-76 and 1980-81 respectively.

Debt Service

The debt service requirements for the 1970's include the cost of carrying the existing long-term public school debt as well as the cost of financing the construction needs projected above. The estimates of costs associated with the existing debt were calculated by (1) a simulation of the building and payoff of the debt incurred during the 1940's and 1950's to estimate decreasing annual debt service requirements for debt issued prior to 1962; (2) for the rest of the debt a simple mortgage model was used to project the future debt service for serial bonds; and (3) for debt to be issued after 1970-71 adjustments to account for the fraction financed by local bonds were made regionally. The interest rates and maturities as of 1970-71 were used for the entire decade.

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The total debt service requirements for local public school debt at constant prices has been simulated. The cost includes the debt service requirements for both the existing and future debt issues. Only relative construction cost increases over and above the consumer price index are taken into account.

The fraction of this total debt service attributable to the existing debt outstanding decreases from about 75 per cent in 1975-76 to about 50 per cent in 1980-81. Total debt service estimated at $2.6 billion in 1967-68 will increase to $4 billion in 1975-76 and $4.7 billion in 1980-81.

SECTION 1

PROJECTIONS OF SCHOOL ENROLLMENTS FOR 1975 AND 1980

May 1, 1971

PROJECTIONS OF SCHOOL ENROLLMENTS FOR 1975 AND 1980

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PROJECTIONS OF SCHOOL ENROLLMENTS FOR 1975 AND 1980

This report presents a series of enrollment projections for 1975 and 1980 for the total United States, four regions of the country (Northeast, North Central, South and West), and by type of residence within each region (central cities of Standard Metropolitan Statistical Areas (SMSA), areas outside of the central city but within the SMSA, and areas outside of the SMSA). The enrollment projections are shown by age group and by groups of grades.

The basic projection of enrollments is tied to Series E of the U.S. Bureau of the Census estimates of population of the U.S. for the years 1975 and 1980, slightly modified by the information reported by the Census Bureau for 1970. This projection estimates that the total population of the U.S. will number 215 million persons in 1975 and 225 million in 1980.

Other estimates of the future population could have been used to make projections. One of the more frequently used series for projecting school enrollments is Series C, also prepared by the U.S. Bureau of the Census. This Series estimates the population of the U.S. at 218 million in 1975 and 232 million in 1980. [Table 1]

Series E is preferred for future projections of the population for a number of reasons. Although the assumptions underlying the Series C projection have been revised downward in the course of the past few years, it is believed that current developments in birth control, especially the liberalization of abortion laws, have not been fully reflected in the projected trend in fertility. Nor does projection C take into account recent changes in propensities of women to pursue careers. Hence, it was decided to use the lowest available projection for birth rates.

Both Series C and Series E projections anticipate a decline in absolute birth rates for women in the future. For instance, a woman born in 1933 is expected to have 3.3 children at the completion of her child-bearing age. Series E anticipates there will be 2.11 children per woman, and Series C anticipates fertility some 16 percent higher than Series E or 2.45 children per woman.

A number of illustrative projections have been prepared below, using the estimates of Series C and Series E. The variations of enrollments using alternative assumptions can thus be pinpointed. The technical memorandum below outlines the techniques used to make these projections.

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Estimates of Total Population by Region and Type of Residence

The total population by region was projected (1) by examining the growth of a given region's population during the period 1950 - 1970, and (2) comparing the total growth relative to the growth of the total U.S. population. The projections of population by region were then compared to the Census Bureau's latest and unpublished estimates of population by state, and were modified to meet these latter projections.

The population of central cities within SMSA's, populations outside of central cities within SMSA's, and the population outside SMSA's was trended in relation compared to overall population growth. This adjustment was based on the trend for the period 1960 - 1970, the only time period for which consistent definitions of SMSA's are available. The relative population in each region by type of residence was derived by using the rates of growth of each type of residence and forcing it to conform to the total population of each region. The adjustments in this step did not exceed five percent of the total population in a given region/type of residence cell. [See Tables 2 and 3]

It will come as no surprise that the projections indicate no significant change in the population of central cities in the Northeast, and the continued growth in other SMSA populations. By contrast, the population of the non-metropolitan areas is likely to show a much slower rate of increase.

In the North Central region growth in central city population is anticipated while suburban populations will continue to increase at a relatively fast rate. Very little growth is anticipated outside of SMSA's.

Southern central cities by contrast, are likely to continue growing although not as fast as their suburbs. The slowing down of the rate of population growth in the late 1970's is projected to result in virtual stability during the last part of the decade in non-SMSA populations.

To test the reasonableness of these projections, the total population projections in central cities, suburbs and outside SMSA's were compared with (1) earlier Bureau of the Census projections for metropolitan areas, and (2) estimates of agricultural employment of the Bureau of Labor Statistics matrix, especially to check estimates of growth outside of the SMSA's. The projections in this study passed both tests.

Adjustments of Nursery, Elementary and Secondary School-Eligible Populations

The projections of the U.S. Bureau of the Census for both Series C and Series E were prepared before the results of the 1970 census became available. It is certain that these projections will be reviewed in the next year or two to conform to the information collected in 1970.

In conformity with good demographic practice, we took the trouble to re-estimate the population by age groups 3,4, 5, 6-9, 10-13, 14 and 15-19 to calculate the ratio between 1970 Census estimates and the preliminary counts of population in 1970. In some cases the estimates of the Census were low by .16 to 1.68 percent, generally in the higher age groups, and were high by a fraction 1.3 - 3.5 percent in the low age groups 5 - 9. Both the 1970 population and Census projections for 1975 and 1980 were readjusted by the small "misses" in Census projections. The adjustments made are shown in Table 4. In retrospect they appear trivial.

The distribution of the eligible age groups by region and type of residence were estimated by (1) using unpublished U.S. Bureau of the Census projections by state, by age group and aggregating them to derive regional shares of each group to total U.S. population, (2) applying these shares to the estimated population for Series E, and (3) allocating the population within each region by type of residence (central city SMSA, outside central city SMSA, and outside SMSA) in proportion to the number of children in the given age group estimated in (a) the preliminary counts of population for 1970 for the total SMSA (no finer analysis is as yet available) and the rest of the region per hundred persons resident in each region, and (b) the allocation between central cities and SMSA's taken from estimates of the relevant age groups by type of residence as derived from a special analysis of the 1967 - 1969 Current Population Survey Sample. In the process of making the adjustment, the 1967 - 1969 CPS sample counts by type of residence were readjusted because they are based upon 1960 SMSA definitions. The population of the SMSA central cities and outside of central cities were uniformly reinflated in each region by the population of the central cities in SMSA's, as of 1960 using the 1970 definition, divided by the population counted in 1960 with the 1960 definition. This is another minor adjustment amounting to four percent. The school eligible population and the factors used to allocate it by region and type of residence by age appear in Table 5.

It should be pointed out that population projections, as well as estimates of school eligible population, are based on definitions of SMSA's as of 1970. If trends between 1960 and 1970 are to continue to 1980, additional SMSA's will be defined by the Budget Bureau. Thus, an additional four percent of age-eligible groups are likely to live in new SMSA's in 1980.

Estimates of School Enrollment for 1975 and 1980

Once estimates of the total population by region and by type of increase were prepared, rates of school attendance had to be estimated. This is not a simple exercise. In the first place, attendance rates for given age groups have increased non-linearly in the course of the past two decades.

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An analysis of past attendance rates by age groups and by grade in each region appears in Table 6. This table illustrates a pattern for regions where school participation was lagging to catch up with the leading regions a decade later. Basically, this method of projection was used to estimate school attendance in all age groups except 15 to 19.

The school attendance rates by grade, which are also shown in that table have also had to be modified from decade to decade. The modal age per grade has been decreasing and a perusal of Table 6 will indicate that the declines have been highest in the South and lowest in the West, where, incidentally, attendance rates were highest. The changes in modal ages per grade for the total U.S. are shown in Table 7.

The decrease in the modal age per grade complicated the projection of attendance by age by grade. As a general rule, the patterns of more advanced areas were projected to apply to the laggards, while the patterns of the more advanced areas were stabilized. The U.S. decennial census information was used for data for 1950 and 1960, and data for 1970 was reconstructed from sample data from the Current Population Surveys for 1967 through 1969. The projected school attendance figures for 1975 and 1980 appear in Table 9. It will be noted that in those areas where the last .2 percent of the eligible school enrollment was reached, they were attending special schools.

Hence, most of the last gap in enrollments was allocated to special schools in line with the experience of those regions and types of residence which had achieved .999 enrollment of the eligible population. For the 15-19 age group, school enrollment in special schools was increased in proportion to the increase in attendance rates.

In the 15-19 age group, high school and college attendance rates were projected separately. The high school rate was projected like other attendance rates, and the college attendance rate was tied to the first-time enrollment series of the Office of Program Planning, U.S. Office of Education. These estimates are reproduced in Table 8.

In the case of enrollment in nursery and kindergarten an assumption was made that by 1980 the enrollment would reach 55 percent of all three-year-olds, 77 percent of all four-year-olds, and would be virtually universal for five-year-olds. This is based on school attendance figures of a number of European countries and is admittedly a high projection. The extension of current trends would anticipate enrollments of half that magnitude by 1975 and 1980. Whether these enrollments will be reached or not depends, to a large extent, on public financing of pre-school education. If the financing is tight, as many as three million fewer children may be enrolled in school by 1975 or 1980.

TECHNICAL MEMORANDUM

PROJECTION OF ENROLLMENTS

PROJECTION OF ENROLLMENTS

Projections of nursery, kindergarten, elementary and secondary schools described in the technical appendix below, place total enrollments at 53.5 to 54.0 million students in 1975 and 53.9 to 57.5 million in 1980. The range in the projections is due to the uncertainties associated with the future course of the birth rate. The lower projection is based on demographic trends projected by the low, Series E, projections of the U.S. Bureau of the Census for these two years. The higher projection is consonant with the high, and recently revised downward, projection, the so-called Series C, also prepared by the Census Bureau. [See Table A]

The projections prepared by this study present the upper limit of probable enrollments. They assume that great strides in the enrollment of younger children will take place during the next ten years. The participation rates of three-year-olds is estimated to reach 55 percent in 1980, that of four-year-olds 77 percent, and attendance by five-year-olds to be practically universal. These attendance rates are consonant with patterns in European countries, which have started early childhood services some ten years before the United States. Projections of past trends would probably produce estimates of pre-elementary enrollments which are lower by 1.2 million in 1975 and 2.5 million in 1980.

Attendance rates at the high school level, adopted by this study, are also somewhat higher than those underlying some other projections. An examination of attendance rates by region, and within region by type of residence, indicates that the increase in high school attendance may increase more than the aggregative projections indicate. The difference between the projection of this study and that of, say, the U.S. Office of Education, National Center for Educational Statistics is .7 million out of 17.2 million high school students in 1980.

Comparison with Census Projections

The discussion of alternative projections and their underlying methodology will, hopefully, justify the assumptions made by this study. For instance, the U.S. Census Bureau published projections in 1968 for enrollments in elementary and secondary school for children ages 5 to 19. The estimate for 1980 is 56.4 million for the projection based on Series C and 48.4 million for Series D, assuming a lower birth rate. The Census projection based on Series C is no longer valid, since the Series has been revised downward, and it is difficult to compare the projections of this study with those of Census. A rough adjustment of the high projection would lower enrollments to 52.4 million. This study's projection would place enrollment using the revised Series C at 51.8 million, after enrollments of 3 and 4-year-olds were excluded to make the two projections comparable.

The big difference between the two projections is in the estimate of high school enrollments which are higher in this study by 1.5 million as compared to the Census Bureau. The differences are due to the different period in choosing the base point in projecting enrollment trends. The Census report bases its projection on the 1951 - 1964 trend, this study uses 1950 - 1969 trends. This study also assumes faster promotion rates than the Census projections.

In order to derive an end point for the projection, this study re-analyzed attendance rates by region and type of residence from the Current Population Survey Sample. Table B compares projections for 1970 based on these rates, with a preliminary count of school population in October 1970. The figures are very close together, especially if (1) special school populations are allocated, and (2) it is realized that this study's figures are closer to U.S.O.E. estimates of high school enrollment based on completed questionnaires by schools. [See Table B]

Comparison with Projections of the National Center for Educational Statistics

Basing itself on past trends, the National Center extends trends in attendance of three, four, five and six-year-olds in private and public nursery schools and kindergartens, which are not part of public or private schools. It also estimates, basing itself on past attendance trends, school population in kindergarten through eighth grade and in high school. Basically, the projection method there is to calculate net progression rates of children entering school, without taking into account repeaters or new immigrants.

For 1975, the National Center has estimated attendance of 36,325 thousand in nursery through eighth grade. Comparable figures of this study, based on Series C are 36,511 thousand students for the same grades. NCES 1975 estimates of enrollments in high school are 16,500 thousand, while the comparable series for this study places it at 17,097 thousand or 3.6 percent more. Perhaps half of the difference can be ascribed to differences in data base. This study's projections are based upon Census estimates of population which include immigration, and thus inflate the number of 15-year-olds by 2.5 percent above the number in 1970. More likely, the differences are due to persistence rates in high school, especially central city high schools.

For 1979/80, the National Center foresees 36,819 thousand children enrolled in nursery through the eighth grade, this study projects 40,014 thousand students. The difference is undoubtedly in the projection of enrollments at the three and four-year-old age group. If the more conservative trend in enrollments was calculated, the estimate of this study and NCES would be very close together. In high school, this study sees some further improvement in attendance rates. Apparently, NCES does not, since their estimate of attendance declines by 100 thousand, despite the fact that the eligible population scarcely changes.

Paradoxically, policy makers who would set their sights on accommodating 53.1 million children from nursery to high school in 1975 and 54.2 million in 1979/80 would not provide for significantly different numbers of children than those who would adopt the projections preferred by this study, the adjusted Series E, which produces estimates of 53.2 and 53.9 million students in 1970 and 1980 respectively. Both the NCES figures and the preferred figures in this study are fairly close to current estimates of enrollments. In all probability, if birth rates rise above the levels postulated by Series E, pre-school enrollments will be curbed. If not, they will grow as fast as projected, since space for preschoolers will be available.

The projections prepared in this report go to much greater detail than the projections cited above. They show estimated enrollments by region of the country and by type of residence. The detailed projections are reproduced in Table 9 appended to the technical memorandum. Suffice it to say here that while total enrollments are not expected to grow much between 1970 and 1980, their composition will change quite a bit.

Enrollments are expected to go down from 13.0 to 10.0 million in the Northeast, 15.0 to 14.0 million in the North Central region, rise from 16.0 to 17.0 million in the South, and increase moderately in the West from 9.0 to 10.0 million. It should be noted that enrollments in Central Cities will decline and so will those in non-SMSA areas. With total enrollments remaining roughly constant, suburban areas of SMSA will grow at the expense of the other two types of residence. [See Table C and Appendix Table A]

TABLE A

ALTERNATIVE PROJECTIONS OF NURSERY THROUGH SECONDARY SCHOOL ENROLLMENT, 1975, 1980
(In Thousands)

		Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	Special Schools
1975								
Series-E	3-19	65,853	53,869	4,848	23,177	7,963	17,097	784
Adjusted-E	3-19	65,499	53,469	4,842	22,718	7,985	17,143	781
Series-C	3-19	66,983	54,395	5,338	23,210	7,963	17,097	787
Adjusted-C	3-19	66,640	53,998	5,334	22,754	7,985	17,140	785
1980								
Series-E	3-19	63,592	54,254	7,943	21,687	6,698	17,167	759
Adjusted-E	3-19	63,244	53,877	7,964	21,230	6,714	17,212	757
Series-C	3-19	67,847	57,969	9,402	23,792	6,820	17,175	780
Adjusted-C	3-19	67,446	57,535	9,432	23,278	6,837	17,209	778

Note: Series C and E adjustments are based on observed relationships between U.S. Census projections and preliminary counts of the 1970 Census. For discussion see Technical Appendix.

TABLE B

COMPARISON OF 1970 ENROLLMENT BASED ON AVERAGED 1967, 1968, 1969 ENROLLMENT RATIOS, AND CPS REPORT
(In Thousands)

	Adv-Rpt. 1970 Total Population	In School	N or K
U.S. Total			
3,4	7,291	1,146	1,123
5	3,822	2,946	2,552
6-9	16,133	16,053	161
10-13	16,678	16,645	-
14	4,110	4,061	-
15-19	19,070	15,123	-
Total	67,104	53,112	3,836
U.S. Census	-	52,941	4,279

Source: See Table 6 of Technical Memorandum. U. S. Department of Commerce, Bureau of the Census, Current Population Reports, Population Characteristics, School Enrollment in the United States: 1970 (advance data October 1970 survey), Series P-20, No. 215, March 5, 1971.

TABLE C

ESTIMATED SCHOOL ATTENDANCE BY TYPE OF RESIDENCE NURSERY THROUGH HIGH SCHOOL (In Millions)

	1970	1975 (Series E)	1980
Central City	15.3	14.5	14.3
SMSA Non-Central City	20.9	22.5	23.6
Other Non-SMSA	17.0	16.5	15.9
Total	53.2	53.5	53.8
NE - Total	12.3	12.3	12.2
NC - Total	15.2	14.8	14.4
S - Total	16.4	16.6	16.9
W - Total	9.3	9.9	10.4
Total	53.2	53.6	53.9

APPENDIX TABLE A

SCHOOL AGE POPULATION, ENROLLMENT RATES AND TOTAL ENROLLMENT FOR U.S. BY REGION
(Series E Adjusted)

1975

Region	Age	Total Population (Thousands)	Percent Enrolled	Total Enrollment (Thousands)
NE	3,4	1,560	.400	624
NC	"	1,915	.250	479
S	"	2,143	.320	686
W	"	1,244	.430	535
Total	"	6,862	.339	2,324
NE	5	747	.950	710
NC	"	921	.900	829
S	"	1,031	.695	717
W	"	599	.935	560
Total	"	3,298	.854	2,816
NE	6-9	3,110	.999	3,107
NC	"	3,817	.999	3,813
S	"	4,327	.999	4,323
W	"	2,492	.999	2,490
Total	"	13,746	.999	13,733
NE	10-13	3,725	.999	3,721
NC	"	4,522	.999	4,517
S	"	5,223	.999	5,218
W	"	2,938	.999	2,935
Total	"	16,408	.999	16,391
NE	14	1,003	.999	1,002
NC	"	1,211	.999	1,210
S	"	1,406	.999	1,405
W	"	783	.999	782
Total	"	4,403	.999	4,399
NE	15-19	4,765	.651	3,103
NC	"	5,814	.677	3,935
S	"	6,504	.662	4,306
W	"	3,699	.675	2,497
Total	"	20,782	.666	13,841
U.S. Elementary and Secondary				
	3,4	6,862	.339	2,324
	5	3,298	.854	2,816
	6-9	13,746	.999	13,733
	10-13	16,408	.999	16,391
	14	4,403	.999	4,399
	15-19	20,782	.666	13,841
		65,499	.817	53,504

APPENDIX TABLE A (Cont.)

SCHOOL AGE POPULATION, ENROLLMENT RATES AND TOTAL ENROLLMENT FOR U.S. BY REGION
(Series E Adjusted)

1980

Region	Age	Total Population (Thousands)	Percent Enrolled	Total Enrollment (Thousands)
NE	3,4	1,714	.730	1,251
NC	"	2,103	.510	1,073
S	"	2,340	.640	1,498
W	"	1,422	.800	1,138
Total	"	7,579	.654	4,960
NE	5	807	.996	804
NC	"	996	.945	941
S	"	1,112	.859	955
W	"	677	.986	668
Total	"	3,592	.938	3,368
NE	6-9	3,002	.999	2,999
NC	"	3,695	.999	3,691
S	"	4,213	.999	4,209
W	"	2,547	.999	2,544
Total	"	13,457	.999	13,443
NE	10-13	3,126	.999	3,123
NC	"	3,780	.999	3,776
S	"	4,478	.999	4,474
W	"	2,644	.999	2,641
Total	"	14,028	.999	14,014
NE	14	845	.999	844
NC	"	1,009	.999	1,008
S	"	1,215	.999	1,214
W	"	707	.999	706
Total	"	3,776	.999	3,772
NE	15-19	4,724	.672	3,177
NC	"	5,618	.699	3,927
S	"	6,609	.684	4,522
W	"	3,861	.698	2,695
Total	"	20,812	.683	14,321
U.S. Elementary and Secondary				
	3,4	7,579	.654	4,960
	5	3,592	.938	3,368
	6-9	13,457	.999	13,443
	10-13	14,028	.999	14,014
	14	3,776	.999	3,772
	15-19	20,812	.683	14,321
		63,244	.852	53,878

TABLE 1

PROJECTIONS OF U.S. POPULATION
(In Millions)

1970	(Preliminary)	203
1975	(Series C)	218
	(Series E)	215
1980	(Series C)	232
	(Series E)	226

Source: 1970 Census of Population, U.S. Department of Commerce, Bureau of the Census, Advance Reports, PC(V2)-1, February 1, 1971.
1975, 1980 Series C and E, U.S. Department of Commerce, Bureau of the Census, Population Estimates and Projections: 1970 to 2020. Series P-25, No. 448, Table 2, p. 19, p. 37.

TABLE 2

RELATIVE RATES OF GROWTH OF THE UNITED STATES POPULATION BY CENSUS REGION AND TYPE OF RESIDENCE WITHIN CENSUS REGION

	1950/60	1960/70	1970/75	1970/80
Region/ U.S. Total				
Northeast	.96	.97	.99	.98
North Central	.98	.97	.98	.97
South	.98	1.01	1.00	1.00
West	1.17	1.10	1.04	1.08
Type of Residence/ Region				
Northeast				
Central City	-	.88	.94	.89
Other SMSA	-	1.08	1.04	1.07
Outside SMSA	-	1.08	1.02	1.03
North Central				
Central City	-	.91	.97	.94
Other SMSA	-	1.14	1.05	1.10
Outside SMSA	-	.97	.97	.95
South				
Central City	-	.99	1.00	.99
Other SMSA	-	1.13	1.03	1.11
Outside SMSA	-	.95	.99	.94
West				
Central City	-	.94	.97	.94
Other SMSA	-	1.10	1.05	1.10
Outside SMSA	-	.93	.95	.89

Source: 1950 U.S. Department of Commerce, Bureau of the Census, PC(1)1A, United States Summary, Table P., Introduction p. XXVI, 1960; 1960, 1970, 1975 and 1980 from Table 3 of this report.

TABLE 3

TOTAL POPULATION BY REGION AND TYPE OF RESIDENCE, ACTUAL 1960, PRELIMINARY 1970, PROJECTED 1975, 1980
(In Thousands)

Northeast	1960	1970	1975	1980
Total	44,677	49,001	51,138	52,994
Central City	17,468	16,876	16,580	16,304
Outside Central City	18,363	21,666	23,468	25,000
Outside SMSA	8,846	10,459	11,090	11,690
North Central				
Total	51,619	56,577	58,368	60,697
Central City	16,740	16,615	16,700	16,700
Outside Central City	16,264	20,241	22,000	23,900
Outside SMSA	18,615	19,721	19,668	20,097
South				
Total	54,973	62,796	66,583	69,909
Central City	15,460	17,408	18,450	19,190
Outside Central City	13,097	16,853	18,348	20,770
Outside SMSA	26,416	28,535	29,785	29,949
West				
Total	28,053	34,807	38,376	41,910
Central City	9,727	11,293	12,040	12,800
Outside Central City	11,296	15,369	17,831	20,335
Outside SMSA	7,030	8,145	8,505	8,775

Source: 1960,1970 Central City, Outside Central City, Outside SMSA, 1970 definitions from; PC(P3)3.

1975,1980 Total region projected on the basis of 1950/60/70 trends, U.S. Bureau of the Census projections, Central City, SMSA Outside of Central City, and Outside SMSA projected as ratio of past decade's growth to population growth.

TABLE 4

ADJUSTMENTS PERFORMED TO ESTIMATE POPULATION BY AGE
(Ratio used to inflate projected age groups for 1975 and 1980)

	U.S. Total	Northeast	North Central	South	West
3,4	1.0142	.9740	1.0362	1.0339	.9992
5	.9871	.9650	1.0065	.9992	.9634
6-9	.9667	.9632	.9775	.9718	.9452
10-13	1.0016	1.0176	1.0008	1.0054	.9761
14	1.0168	1.0130	1.0103	1.0189	1.0308
15-19	.9990	.9829	.9756	1.0198	1.0215

Source: Computed from the relationship between U.S. Department of Commerce, Bureau of the Census, Population Estimates and Projections, 1970 to 2020, P-25, No. 448, Table 2, p.37; and the Advance Reports, PC(U2).

TABLE 5

SCHOOL ELIGIBLE POPULATION 1960, 1970 AND PROJECTIONS TO 1975 AND 1980 BY AGE GROUP AND REGION

(In Thousands)

	1960	1970 Adv.	1975	1980
United States Total				
3,4	7,983	7,291	6,864	7,582
5	3,958	3,822	3,300	3,595
6-9	14,704	16,133	13,749	13,462
10-13	14,063	16,678	16,410	14,034
14	2,747	4,110	4,402	3,773
15-19	13,272	19,070	20,785	20,804
Northeast Total				
3,4		1,688	1,560	1,714
5	895	883	747	807
6-9	3,325	3,713	3,110	3,002
10-13	3,243	3,820	3,725	3,126
14	634	938	1,003	845
15-19	3,040	4,317	4,765	4,724
North Central Total				
3,4		2,063	1,915	2,103
5	1,163	1,086	921	996
6-9	4,293	4,611	3,817	3,695
10-13	4,000	4,787	4,522	3,780
14	760	1,178	1,211	1,009
15-19	3,698	5,402	5,814	5,618
South Total				
3,4		2,285	2,143	2,340
5	1,271	1,194	1,031	1,112
6-9	4,728	5,034	4,327	4,213
10-13	4,601	5,217	5,223	4,478
14	926	1,293	1,406	1,215
15-19	4,489	6,071	6,504	6,609
West Total				
3,4		1,254	1,244	1,422
5	629	658	599	677
6-9	2,358	2,775	2,492	2,547
10-13	2,219	2,855	2,938	2,644
14	427	702	783	707
15-19	2,045	3,276	3,699	3,861

TABLE 5 (Cont.)

SERIES E - NUMBER OF PERSONS IN SCHOOL ELIGIBLE GROUP PER HUNDRED POPULATION
NORTHEAST

	1970	1975	1980
NE 3,4	3.44	3.05	3.23
Central City	3.30	2.93	3.10
Other SMSA	3.54	3.14	3.32
Outside SMSA	3.27	2.90	3.07
NE 5	1.80	1.46	1.52
Central City	1.71	1.39	1.44
Other SMSA	1.86	1.51	1.57
Outside SMSA	1.83	1.48	1.54
NE 6-9	7.58	6.08	5.66
Central City	6.97	5.59	5.20
Other SMSA	8.02	6.43	5.99
Outside SMSA	7.63	6.12	5.70
NE 10-13	7.80	7.28	5.90
Central City	7.29	6.80	5.51
Other SMSA	8.21	7.66	6.21
Outside SMSA	7.75	7.23	5.86
NE 14	1.91	1.96	1.59
Central City	1.74	1.79	1.45
Other SMSA	2.06	2.11	1.71
Outside SMSA	1.89	1.93	1.57
NE 15-19	8.81	9.32	8.91
Central City	8.37	8.85	8.46
Other SMSA	9.15	9.70	9.25
Outside SMSA	8.82	9.33	8.92

TABLE 5 (Cont.)

SERIES E - NUMBER OF PERSONS IN SCHOOL ELIGIBLE GROUP PER HUNDRED POPULATION
NORTH CENTRAL

	1970	1975	1980
NC 3,4	3.65	3.28	3.46
Central City	3.65	3.28	3.46
Other SMSA	3.90	3.50	3.70
Outside SMSA	3.38	3.04	3.20
NC 5	1.92	1.58	1.64
Central City	1.87	1.54	1.60
Other SMSA	2.08	1.71	1.78
Outside SMSA	1.80	1.48	1.54
NC 6-9	8.15	6.54	6.09
Central City	7.20	5.78	5.38
Other SMSA	9.37	7.52	7.00
Outside SMSA	7.70	6.18	5.75
NC 10-13	8.46	7.75	6.23
Central City	7.64	7.00	5.63
Other SMSA	9.54	8.74	7.03
Outside SMSA	8.06	7.38	5.93
NC 14	2.08	2.07	1.66
Central City	1.95	1.94	1.56
Other SMSA	2.27	2.26	1.81
Outside SMSA	2.00	1.99	1.60
NC 15-19	9.55	9.96	9.26
Central City	9.00	9.39	8.73
Other SMSA	10.16	10.60	9.86
Outside SMSA	9.39	9.79	9.10

TABLE 5 (Cont.)

SERIES E - NUMBER OF PERSONS IN SCHOOL ELIGIBLE GROUP PER HUNDRED POPULATION
SOUTH

	1970	1975	1980
S 3,4	3.64	3.22	3.35
Central City	3.43	3.03	3.16
Other SMSA	3.98	3.52	3.66
Outside SMSA	3.56	3.15	3.28
S 5	1.90	1.55	1.59
Central City	1.73	1.41	1.45
Other SMSA	2.14	1.75	1.79
Outside SMSA	1.86	1.52	1.56
S 6-9	8.02	6.50	6.03
Central City	7.27	5.89	5.47
Other SMSA	9.01	7.30	6.77
Outside SMSA	7.89	6.39	5.93
S 10-13	8.31	7.84	6.41
Central City	7.34	6.92	5.66
Other SMSA	9.38	8.85	7.24
Outside SMSA	8.26	7.80	6.37
S 14	2.06	2.11	1.74
Central City	1.90	1.95	1.60
Other SMSA	2.21	2.26	1.87
Outside SMSA	2.07	2.12	1.75
S 15-19	9.67	9.77	9.45
Central City	8.90	8.99	8.70
Other SMSA	10.16	10.27	9.93
Outside SMSA	9.84	9.94	9.62

TABLE 5 (Cont.)

SERIES E - NUMBER OF PERSONS IN SCHOOL ELIGIBLE GROUP PER HUNDRED POPULATION
WEST

	1970	1975	1980
W 3,4	3.60	3.24	3.39
Central City	3.33	3.00	3.14
Other SMSA	3.95	3.55	3.71
Outside SMSA	3.33	3.00	3.14
W 5	1.89	1.56	1.62
Central City	1.77	1.46	1.52
Other SMSA	2.05	1.69	1.75
Outside SMSA	1.76	1.45	1.51
W 6-9	7.97	6.49	6.08
Central City	7.45	6.07	5.69
Other SMSA	8.56	6.97	6.53
Outside SMSA	7.60	6.19	5.80
W 10-13	8.20	7.66	6.31
Central City	7.33	6.85	5.64
Other SMSA	8.93	8.34	6.87
Outside SMSA	8.03	7.50	6.18
W 14	2.02	2.04	1.69
Central City	1.70	1.72	1.67
Other SMSA	2.26	2.28	1.89
Outside SMSA	1.99	2.01	1.67
W 15-19	9.41	9.64	9.21
Central City	8.31	8.51	8.13
Other SMSA	10.33	10.58	10.11
Outside SMSA	9.20	9.42	9.00

TABLE 6

ENROLLMENT RATES BY AGE AND LEVEL OF ATTENDANCE FOR TOTAL UNITED STATES, REGION AND TYPE OF RESIDENCE 1950, 1960, 1967/68/69

	In School			Nursery or Kindergarten		
	1950	1960	Averaged 1967/8/9	1950	1960	Averaged 1967/8/9
U.S. Total						
3,4	-	-	.158	-	-	.154
5	.343	.448	.773	.238	.381	.668
6-9	.904	.939	.995	.024	.043	.010
10-13	.960	.975	.998	-	-	-
14	.948	.953	.988	-	-	-
15-19	.606	.695	.793	-	-	-

	Elementary 1-6			Elementary 7,8		
3,4	-	-	-	-	-	-
5	.104	.068	.105	-	-	-
6-9	.879	.895	.985	-	-	-
10-13	.666	.611	.534	.281	.353	.429
14	.111	.045	.022	.438	.385	.195
15-19	.024	.003	-	.059	.039	.020

	High School 9-12			College 1-4		
3,4	-	-	-	-	-	-
5	-	-	-	-	-	-
6-9	-	-	-	-	-	-
10-13	.014	.012	.028	-	-	-
14	.399	.524	.767	-	-	-
15-19	.461	.575	.605	.062	.078	.146

TABLE 6 (Cont.)

ENROLLMENT RATES BY AGE AND LEVEL OF ATTENDANCE FOR TOTAL UNITED STATES, REGION AND TYPE OF RESIDENCE 1950, 1960, 1967/68/69

	In School			Nursery or Kindergarten		
	1950	1960	Averaged 1967/8/9	1950	1960	Averaged 1967/8/9
Northeast						
3,4	-	-	.180	-	-	.178
5	.470	.581	.904	.346	.511	.740
6-9	.930	.960	.997	.028	.048	.009
10-13	.958	.975	.999	-	-	-
14	.957	.955	.993	-	-	-
15-19	.633	.706	.809	-	-	-

	Elementary 1-6			Elementary 7,8		
3,4	-	-	-	-	-	-
5	.124	.070	.164	-	-	-
6-9	.902	.912	.988	-	-	-
10-13	.605	.568	.509	.331	.589	.442
14	.065	.030	.017	.384	.310	.159
15-19	.017	.003	-	.047	.031	.012

	High School 9-12			College 1-4		
3,4	-	-	-	-	-	-
5	-	-	-	-	-	-
6-9	-	-	-	-	-	-
10-13	.022	.018	.041	-	-	-
14	.507	.615	.809	-	-	-
15-19	.497	.582	.599	.072	.091	.175

TABLE 6 (Cont.)

ENROLLMENT RATES BY AGE AND LEVEL OF ATTENDANCE FOR TOTAL UNITED STATES, REGION AND TYPE OF RESIDENCE
1950, 1960, 1967/68/69

	In School			Nursery or Kindergarten		
	1950	1960	Averaged 1967/8/9	1950	1960	Averaged 1967/8/9
North Central						
3,4	-	-	.119	-	-	.115
5	.418	.530	.857	.319	.479	.796
6-9	.928	.956	.997	.038	.062	.018
10-13	.966	.979	.999	-	-	-
14	.959	.960	.991	-	-	-
15-19	.634	.714	.797	-	-	-
	Elementary 1-6			Elementary 7,8		
3,4	-	-	-	-	-	-
5	.099	.052	.061	-	-	-
6-9	.890	.894	.979	-	-	-
10-13	.636	.603	.533	.319	.368	.434
14	.054	.024	.021	.444	.383	.183
15-19	.012	.002	-	.044	.028	.011
	High School 9-12			College 1-4		
3,4	-	-	-	-	-	-
5	-	-	-	-	-	-
6-9	-	-	-	-	-	-
10-13	.012	.008	.024	-	-	-
14	.461	.553	.784	-	-	-
15-19	.511	.602	.618	.065	.082	.144

TABLE 6 (Cont.)

ENROLLMENT RATES BY AGE AND LEVEL OF ATTENDANCE FOR
TOTAL UNITED STATES, REGION AND TYPE OF RESIDENCE
1950, 1960, 1967/68/69

	In School			Nursery or Kindergarten		
	1950	1960	Averaged 1967/8/9	1950	1960	Averaged 1967/8/9
South						
3,4	-	-	.151	-	-	.146
5	.158	.230	.532	.067	.146	.427
6-9	.860	.899	.991	.009	.017	.004
10-13	.954	.968	.996	-	-	-
14	.927	.938	.980	-	-	-
15-19	.551	.660	.765	-	-	-

	Elementary 1-6			Elementary 7,8		
3,4	-	-	-	-	-	-
5	.092	.084	.105	-	-	-
6-9	.851	.881	.986	.001	-	-
10-13	.733	.650	.557	.211	.308	.410
14	.203	.083	.029	.458	.444	.265
15-19	.042	.005	-	.084	.061	.044

	High School 9-12			College 1-4		
3,4	-	-	-	-	-	-
5	-	-	-	-	-	-
6-9	-	-	-	-	-	-
10-13	.010	.011	.025	-	-	-
14	.266	.411	.683	-	-	-
15-19	.377	.533	.583	.048	.061	.117

TABLE 6 (Cont.)

ENROLLMENT RATES BY AGE AND LEVEL OF ATTENDANCE FOR TOTAL UNITED STATES, REGION AND TYPE OF RESIDENCE 1950, 1960, 1967/68/69

West

	In School			Nursery or Kindergarten		
	1950	1960	Averaged 1967/8/9	1950	1960	Averaged 1967/8/9
3,4	-	-	.201	-	-	.195
5	.458	.547	.885	.342	.487	.791
6-9	.925	.954	.997	.029	.057	.006
10-13	.970	.981	.999	-	-	-
14	.968	.970	.991	-	-	-
15-19	.654	.722	.816	-	-	-

	Elementary 1-6			Elementary 7,8		
3,4	-	-	-	-	-	-
5	.117	.060	.094	-	-	-
6-9	.895	.898	.991	-	-	-
10-13	.649	.604	.531	.309	.368	.437
14	.056	.020	.015	.460	.372	.138
15-19	.013	.001	-	.042	.023	.005

	High School 9-12			College 1-4		
3,4	-	-	-	-	-	-
5	-	-	-	-	-	-
6-9	-	-	-	-	-	-
10-13	.012	.011	.027	-	-	-
14	.452	.579	.833	-	-	-
15-19	.520	.608	.632	.079	.090	.161

TABLE 6 (Cont.)

ENROLLMENT RATES BY AGE AND LEVEL OF ATTENDANCE FOR TOTAL UNITED STATES, REGION AND TYPE OF RESIDENCE
1960, 1967/68/69

	In School		N or K		E 1-8	E 1-6	E 7,8	HS 9-12		College	
	1960	1967/8/9	1960	1967/8/9	1960	Average	1967/8/9	1960	1967/8/9	1960	1967/8/9
Northeast											
Central City											
3,4	-	.193	-	.188	-	-	-	-	-	-	-
5	.638	.889	.529	.704	.109	.181	-	-	-	-	-
6-9	.955	.997	.040	.009	.914	.986	-	-	-	-	-
10-13	.966	.998	-	-	.934	.520	.432	.031	.043	-	-
14	.941	.991	-	-	.288	.022	.216	.653	.740	-	-
15-19	.667	.757	-	-	.031	-	.018	.534	.559	.101	.157
Other SMSA											
3,4	-	.190	-	.190	-	-	-	-	-	-	-
5	.617	.910	.567	.740	.049	.167	-	-	-	-	-
6-9	.917	.997	.056	.008	.915	.982	-	-	-	-	-
10-13	.980	.999	-	-	.968	.496	.453	.012	.041	-	-
14	.967	.994	-	-	.326	.012	.119	.642	.861	-	-
15-19	.759	.843	-	-	.028	-	.006	.647	.620	.084	.195
Outside SMSA											
3,4	-	.140	-	.137	-	-	-	-	-	-	-
5	.492	.913	.438	.799	.054	.114	-	-	-	-	-
6-9	.956	.998	.050	.011	.907	.980	-	-	-	-	-
10-13	.978	.998	-	-	.968	.519	.437	.010	.037	-	-
14	.959	.994	-	-	.408	.018	.169	.551	.801	-	-
15-19	.703	.816	-	-	.040	-	.014	.579	.610	.084	.166

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TABLE 6 (Cont.)

ENROLLMENT RATES BY AGE AND LEVEL OF ATTENDANCE FOR TOTAL UNITED STATES, REGION AND TYPE OF RESIDENCE 1960, 1967/68/69

	In School		N or K		E 1-8	E 1-6	E 7,8	HS 9-12		College	
	1960	1967/8/9	1960	1967/8/9	1960	Average	1967/8/9	1960	1967/8/9	1960	1967/8/9
North Central											
Central City											
3,4	-	.149	-	.140	-	-	-	-	-	-	-
5	.692	.912	.618	.827	.074	.080	-	-	-	-	-
6-9	.968	.995	.057	.017	.911	.974	-	-	-	-	-
10-13	.973	.998	-	-	.961	.543	.413	.012	.032	-	-
14	.950	.988	-	-	.398	.025	.230	.551	.728	-	-
15-19	.680	.761	-	-	.031	-	.017	.545	.579	.104	.137
Other SMSA											
3,4	-	.146	-	.146	-	-	-	-	-	-	-
5	.580	.888	.545	.822	.035	.065	-	-	-	-	-
6-9	.969	.997	.077	.014	.892	.979	-	-	-	-	-
10-13	.986	.998	-	-	.980	.515	.454	.007	.024	-	-
14	.976	.987	-	-	.391	.016	.156	.585	.809	-	-
15-19	.738	.819	-	-	.025	-	.006	.639	.640	.073	.153
Outside SMSA											
3,4	-	.072	-	.068	-	-	-	-	-	-	-
5	.411	.791	.364	.748	.046	.039	-	-	-	-	-
6-9	.944	.997	.058	.022	.886	.973	-	-	-	-	-
10-13	.980	.997	-	-	.973	.544	.430	.007	.018	-	-
14	.960	.997	-	-	.417	.019	.178	.543	.801	-	-
15-19	.726	.803	-	-	.031	-	.013	.622	.626	.072	.141

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TABLE 6 (Cont.)

ENROLLMENT RATES BY AGE AND LEVEL OF ATTENDANCE FOR TOTAL UNITED STATES, REGION AND TYPE OF RESIDENCE
1960, 1967/68/69

	In School		N or K		E 1-8	E 1-6	E 7,8	HS 9-12		College	
	1960	1967/8/9	1960	1967/8/9	1960	Average 1967/8/9	1967/8/9	1950	1967/8/9	1960	1967/8/9
South											
Central City											
3,4	-	.214	-	.209	-	-	-	-	-	-	-
5	.340	.648	.262	.549	.077	.094	-	-	-	-	-
6-9	.913	.992	.035	.013	.878	.972	-	-	-	-	-
10-13	.917	.995	-	-	.957	.555	.413	.014	.021	-	-
14	.944	.984	-	-	.485	.029	.276	.459	.675	-	-
15-19	.660	.758	-	-	.049	-	.028	.524	.562	.088	.145
Other SMSA											
3,4	-	.187	-	.184	-	-	-	-	-	-	-
5	.276	.646	.222	.518	.059	.124	-	-	-	-	-
6-9	.922	.995	.025	.003	.897	.986	-	-	-	-	-
10-13	.981	.997	-	-	.972	.534	.433	.009	.026	-	-
14	.965	.988	-	-	.449	.025	.255	.517	.738	-	-
15-19	.693	.812	-	-	.046	-	.063	.583	.615	.064	.118
Outside SMSA											
3,4	-	.104	-	.100	-	-	-	-	-	-	-
5	.174	.423	.081	.324	.094	.099	-	-	-	-	-
6-9	.888	.989	.008	.001	.880	.985	-	-	-	-	-
10-13	.965	.996	-	-	.956	.569	.398	.010	.026	-	-
14	.931	.974	-	-	.553	.032	.278	.378	.661	-	-
15-19	.655	.745	-	-	.075	-	.056	.529	.579	.051	.102

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TABLE 6 (Cont.)

ENROLLMENT RATES BY AGE AND LEVEL OF ATTENDANCE FOR TOTAL UNITED STATES, REGION AND TYPE OF RESIDENCE 1960, 1967/68/69

	In School		N or K		E 1-8	E 1-6	E 7,8	HS 9-12		College	
West	1960	1967/8/9	1960	1967/8/9	1960	Average 1967/8/9		1960	1969/8/9	1960	1967/8/9
Central City											
3,4	-	.253	-	.241	-	-	-	-	-	-	-
5	.644	.901	.564	.796	.080	.106	-	-	-	-	-
6-9	.964	.997	.051	.005	.912	.983	-	-	-	-	-
10-13	.980	1.000	-	-	.963	.538	.415	.018	.040	-	-
14	.968	.985	-	-	.346	.015	.123	.622	.838	-	-
15-19	.704	.799	-	-	.018	-	.002	.568	.587	.117	.193
Other SMSA											
3,4	-	.215	-	.212	-	-	-	-	-	-	-
5	.632	.935	.582	.823	.050	.113	-	-	-	-	-
6-9	.972	.999	.071	.007	.901	.989	-	-	-	-	-
10-13	.986	.998	-	-	.976	.525	.446	.010	.024	-	-
14	.978	.992	-	-	.340	.012	.127	.683	.850	-	-
15-19	.745	.826	-	-	.017	-	.005	.634	.652	.093	.153
Outside SMSA											
3,4	-	.131	-	.123	-	-	-	-	-	-	-
5	.417	.784	.364	.734	.053	.050	-	-	-	-	-
6-9	.936	.993	.051	.007	.885	.980	-	-	-	-	-
10-13	.980	.998	-	-	.973	.533	.441	.007	.018	-	-
14	.968	.994	-	-	.459	.019	.166	.510	.803	-	-
15-19	.721	.815	-	-	.032	-	.009	.621	.641	.068	.143

Source: 1950; Computed from U.S. Department of Commerce, Bureau of the Census, Population of U.S. Detailed Characteristics, PC(1)1D, Table 151, P. 341, Table 152, p. 345; 1960; Computed from U.S. Department of Commerce, Bureau of the Census, Population of U.S. Detailed Characteristics, PC(1)1D, Table 167, p.375, Table 240, p. 632, Table 275, p. 754. Average 1967,68,69, Bureau of the Census, based on analysis of CPS sample enrollment by single year of school.

TABLE 7

MEDIAN AGE OF PERSONS 3 TO 34 ENROLLED IN SCHOOL, BY YEAR IN WHICH ENROLLED, FOR THE UNITED STATES: 1960 AND 1969

		Elementary							
Total	Kindergarten	1	2	3	4	5	6	7	8
U.S. 1969	5.5	6.5	7.6	8.6	9.6	10.6	11.6	12.6	13.6
U.S. 1960	5.7	6.8	7.8	8.8	9.9	10.9	11.9	12.9	13.8

	High School				College				5 or Higher
	9	10	11	12	1	2	3	4	
U.S. 1969	14.6	15.6	16.6	17.6	18.7	19.8	20.8	21.9	25.6
U.S. 1960	14.9	15.9	16.8	17.9	18.9	20.1	21.2	22.7	26.6

Note: 1960 median age of persons 5 to 34.

Source: 1960 U.S. Department of Commerce, Bureau of the Census Report PC(1) 1D, Table 171, Table 171, p. 397; 1969 figures as above source (unpublished results of CPS).

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TABLE 8

PROJECTED RATES OF SCHOOL ENROLLMENT BY GRADE GROUPINGS
NORTHEAST REGION

1975

	Total	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
NE - Central City							
3,4	.428	.423	-	-	-	-	.005
5	.934	.727	.202	-	-	-	.005
6-9	.999	.040	.951	-	-	-	.008
10-13	.999	-	.517	.429	.043	-	.010
14	.999	-	.010	.181	.787	-	.021
15-19	.799	-	-	.010	.583	.182	.024
NE - Other SMSA							
3,4	.422	.422	-	-	-	-	-
5	.956	.776	.175	-	-	-	.005
6-9	.999	.010	.981	-	-	-	.008
10-13	.999	-	.496	.452	.041	-	.010
14	.999	-	.010	.112	.861	-	.016
15-19	.890	-	-	.005	.642	.220	.023
NE - Outside SMSA							
3,4	.311	.306	-	-	-	-	.005
5	.940	.825	.110	-	-	-	.005
6-9	.999	.010	.981	-	-	-	.008
10-13	.999	-	.517	.435	.037	-	.010
14	.999	-	.010	.112	.861	-	.016
15-19	.844	-	-	.005	.631	.187	.021

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TABLE 8 (Cont.)

PROJECTED RATES OF SCHOOL ENROLLMENT BY GRADE GROUPINGS
NORTHEAST REGION

1980

	Total	K	E 1-6	E 7,8	HS 9-12	College	Special Schools
NE - Central City							
3,4	.782	.777	-	-	-	-	.005
5	.979	.762	.212	-	-	-	.005
6-9	.999	.040	.951	-	-	-	.008
10-13	.999	-	.517	.429	.043	-	.010
14	.999	-	.010	.130	.838	-	.021
15-19	.842	-	-	.010	.599	.209	.024
NE - Other SMSA							
3,4	.771	.771	-	-	-	-	-
5	.999	.812	.182	-	-	-	.005
6-9	.999	.010	.981	-	-	-	.008
10-13	.999	-	.496	.452	.041	-	.010
14	.999	-	.010	.112	.861	-	.016
15-19	.936	-	-	.005	.665	.243	.023
NE - Outside SMSA							
3,4	.568	.563	-	-	-	-	.005
5	.999	.880	.114	-	-	-	.005
6-9	.999	.010	.981	-	-	-	.008
10-13	.999	-	.517	.435	.037	-	.010
14	.999	-	.010	.112	.861	-	.016
15-19	.891	-	-	.005	.654	.211	.021

Notes: 3,4 all in N or K. 5-year-olds, same proportion in first grade as in 1967-69. 6-9 year-olds, one percent in K. 10-13 year-olds, 1-6 .546 of all elementary in 1-6 for CC; .523 in Other SMSA; .543 in Outside SMSA. 7-8 difference between .999 and 1-6 enrollment. 14 year-olds, one percent in 1-6. 15-19, proportion in college 1.15 times in 1975; 1.26 times in 1980 from OPPE enrollment model. Note on Special Schools: when enrollment nears .995 additional enrollment is in Special Schools for other categories in proportion to enrollment of eligibles.

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TABLE 8 (Cont.)

PROJECTED RATES OF SCHOOL ENROLLMENT BY GRADE GROUPINGS
NORTH CENTRAL REGION

1975

	Total	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
NC - Central City							
3,4	.365	.361	-	-	-	-	.004
5	.921	.836	.080	-	-	-	.005
6-9	.999	.012	.982	-	-	-	.005
10-13	.999	-	.548	.414	.032	-	.005
14	.999	-	.010	.194	.774	-	.021
15-19	.803	-	-	.020	.599	.155	.029
NC - Other SMSA							
3,4	.262	.262	-	-	-	-	-
5	.940	.869	.066	-	-	-	.005
6-9	.999	.014	.978	-	-	-	.007
10-13	.999	-	.513	.453	.024	-	.009
14	.999	-	.010	.110	.860	-	.019
15-19	.865	-	-	.005	.663	.173	.024
NC - Outside SMSA							
3,4	.129	.125	-	-	-	-	.004
5	.837	.793	.039	-	-	-	.005
6-9	.999	.022	.970	-	-	-	.007
10-13	.999	-	.571	.401	.018	-	.009
14	.999	-	.010	.107	.861	-	.021
15-19	.847	-	-	.010	.648	.165	.024

TABLE 8 (Cont.)

PROJECTED RATES OF SCHOOL ENROLLMENT BY GRADE GROUPINGS
NORTH CENTRAL REGION

1980

	Total	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
NC - Central City							
3,4	.697	.693	-	-	-	-	.004
5	.965	.875	.085	-	-	-	.005
6-9	.999	.010	.984	-	-	-	.005
10-13	.999	-	.548	.414	.032	-	.005
14	.999	-	.010	.144	.824	-	.021
15-19	.839	-	-	.014	.621	.174	.030
NC - Other SMSA							
3,4	.557	.557	-	-	-	-	-
5	.983	.906	.072	-	-	-	.005
6-9	.999	.014	.978	-	-	-	.007
10-13	.999	-	.513	.453	.024	-	.009
14	.999	-	.010	.110	.860	-	.019
15-19	.910	-	-	.005	.687	.194	.024
NC - Outside SMSA							
3,4	.275	.271	-	-	-	-	.004
5	.875	.831	.039	-	-	-	.005
6-9	.999	.022	.970	-	-	-	.007
10-13	.999	-	.571	.401	.018	-	.009
14	.999	-	.010	.107	.861	-	.021
15-19	.883	-	-	.008	.672	.179	.024

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Note K 1980 as NC in Central City.

TABLE 8 (Cont.)

PROJECTED RATES OF SCHOOL ENROLLMENT BY GRADE GROUPINGS
SOUTH REGION

1975

	Total	N	E 1-6	E 7,8	HS 9-12	College	Special Schools
S - Central City							
3,4	.453	.448	-	-	-	-	.005
5	.792	.671	.116	-	-	-	.005
6-9	.999	.010	.982	-	-	-	.007
10-13	.999	-	.552	.411	.025	-	.011
14	.999	-	.015	.234	.730	-	.020
15-19	.800	-	-	.018	.594	.164	.024
S - Other SMSA							
3,4	.396	.394	-	-	-	-	.002
5	.789	.635	.150	-	-	-	.004
6-9	.999	.005	.989	-	-	-	.005
10-13	.999	-	.536	.434	.024	-	.005
14	.999	-	.012	.139	.840	-	.008
15-19	.821	-	-	.030	.642	.133	.016
S - Outside SMSA							
3,4	.185	.180	-	-	-	-	.005
5	.511	.395	.111	-	-	-	.005
6-9	.999	-	.994	-	-	-	.005
10-13	.999	-	.569	.399	.026	-	.005
14	.999	-	.015	.295	.679	-	.010
15-19	.775	-	-	.030	.606	.115	.024

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TABLE 8 (Cont.)

PROJECTED RATES OF SCHOOL ENROLLMENT BY GRADE GROUPINGS
SOUTH REGION

1980

	Total	N	E 1-6	E 7,8	HS 9-12	College	Special Schools
S - Central City							
3,4	.831	.826	-	-	-	-	.005
5	.948	.805	.138	-	-	-	.005
6-9	.999	.010	.982	-	-	-	.007
10-13	.999	-	.549	.409	.030	-	.011
14	.999	-	.010	.187	.782	-	.020
15-19	.844	-	-	.010	.626	.184	.024
S - Other SMSA							
3,4	.763	.761	-	-	-	-	.002
5	.951	.749	.198	-	-	-	.004
6-9	.999	.005	.989	-	-	-	.005
10-13	.999	-	.536	.434	.024	-	.005
14	.999	-	.012	.125	.854	-	.008
15-19	.855	-	-	.020	.669	.150	.016
S - Outside SMSA							
3,4	.425	.420	-	-	-	-	.005
5	.733	.558	.170	-	-	-	.005
6-9	.999	.010	.984	-	-	-	.005
10-13	.999	-	.569	.399	.026	-	.005
14	.999	-	.010	.204	.775	-	.010
15-19	.813	-	-	.030	.629	.130	.024

TABLE 8 (Cont.)

PROJECTED RATES OF SCHOOL ENROLLMENT BY GRADE GROUPINGS
WEST REGION

1975

	Total	N	E 1-6	E 7,8	HS 9-12	College	Special Schools
W - Central City							
3,4	.525	.521	-	-	-	-	.005
5	.942	.822	.115	-	-	-	.005
6-9	.999	.005.	.989	-	-	-	.005
10-13	.999	-	.545	.406	.040	-	.008
14	.999	-	.005	.133	.840	-	.021
15-19	.848	-	-	.002	.607	.218	.021
W - Other SMSA							
3,4	.440	.440	-	-	-	-	-
5	.976	.859	.117	-	-	-	-
6-9	.999	.005	.989	-	-	-	.005
10-13	.999	-	.533	.431	.030	-	.005
14	.999	-	.005	.133	.853	-	.008
15-19	.865	-	-	.002	.675	.173	.015
W - Outside SMSA							
3,4	.272	.267	-	-	-	-	.005
5	.819	.698	.116	-	-	-	.005
6-9	.999	.005	.986	-	-	-	.008
10-13	.999	-	.528	.436	.025	-	.010
14	.999	-	.005	.158	.825	-	.011
15-19	.854	-	-	.005	.663	.162	.024

TABLE 8 (Cont.)

PROJECTED RATES OF SCHOOL ENROLLMENT BY GRADE GROUPINGS
WEST REGION

1980

	Total	N	E 1-6	E 7,8	HS 9-12	College	Special Schools
W - Central City							
3,4	.968	.963	-	-	-	-	.005
5	.999	.872	.122	-	-	-	.005
6-9	.999	.005	.989	-	-	-	.005
10-13	.999	-	.545	.406	.040	-	.008
14	.999	-	.005	.133	.840	-	.021
15-19	.897	-	-	.002	.629	.245	.021
W - Other SMSA							
3,4	.817	.817	-	-	-	-	-
5	.999	.878	.121	-	-	-	-
6-9	.999	.005	.989	-	-	-	.005
10-13	.999	-	.533	.421	.040	-	.005
14	.999	-	.005	.133	.853	-	.008
15-19	.909	-	-	.002	.698	.194	.015
W - Outside SMSA							
3,4	.505	.500	-	-	-	-	.005
5	.924	.804	.115	-	-	-	.005
6-9	.999	.005	.986	-	-	-	.008
10-13	.999	-	.527	.436	.025	-	.010
14	.999	-	.005	.153	.825	-	.011
15-19	.898	-	-	.005	.687	.182	.024

TABLE 9

SERIES C

PROJECTIONS OF ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE FOR THE TOTAL UNITED STATES, REGION, AND BY TYPE OF RESIDENCE WITHIN REGION

(SERIES C ADJUSTED BY ADVANCED REPORT)

SERIES E

PROJECTIONS OF ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE FOR THE TOTAL UNITED STATES, REGION, AND BY TYPE OF RESIDENCE WITHIN REGION

(SERIES E ADJUSTED BY ADVANCED REPORT)

Note: Totals may not add due to rounding.

TABLE 9

SERIES C - TOTAL UNITED STATES ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE
(In Thousands)

1975

	Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
Total U.S.								
3,4	7,613	2,575	2,553	-	-	-	-	22
5	3,628	3,061	2,629	417	-	-	-	15
6-9	14,223	14,207	156	13,960	-	-	-	91
10-13	16,384	16,368	-	8,789	6,967	485	-	127
14	4,329	4,327	-	44	717	3,500	-	66
15-19	20,806	17,320	-	-	279	13,112	3,463	466
Total	66,983	57,858	5,338	23,210	7,963	17,097	3,463	787
Central City								
3,4	2,172	945	935	-	-	-	-	10
5	1,013	904	772	128	-	-	-	4
6-9	3,830	3,826	65	3,736	-	-	-	25
10-13	4,379	4,375	-	2,366	1,820	151	-	38
14	1,166	1,166	-	12	224	906	-	24
15-19	5,713	4,624	-	-	78	3,401	1,004	141
Total	18,273	15,840	1,772	6,242	2,122	4,458	1,004	242
Other SMSA								
3,4	3,095	1,163	1,162	-	-	-	-	1
5	1,483	1,356	1,163	187	-	-	-	6
6-9	5,931	5,925	53	5,834	-	-	-	38
10-13	6,809	6,802	-	3,529	3,020	203	-	50
14	1,781	1,780	-	17	218	1,522	-	23
15-19	8,377	7,220	-	-	84	5,490	1,480	166
Total	27,476	24,246	2,378	9,567	3,322	7,215	1,480	284
Outside SMSA								
3,4	2,346	467	456	-	-	-	-	11
5	1,132	801	693	102	-	-	-	6
6-9	4,462	4,457	38	4,391	-	-	-	28
10-13	5,196	5,191	-	2,892	2,128	132	-	39
14	1,382	1,381	-	16	274	1,071	-	20
15-19	6,717	5,478	-	-	117	4,224	979	158
Total	21,235	17,775	1,187	7,401	2,519	5,427	979	262

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TABLE 9 (Cont.)

SERIES C - TOTAL UNITED STATES ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE
(In Thousands)

1980

	Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
Total U.S.								
3,4	8,917	5,833	5,806	-	-	-	-	27
5	4,265	3,998	3,409	569	-	-	-	20
6-9	15,832	15,816	187	15,529	-	-	-	100
10-13	14,297	14,282	-	7,660	6,072	441	-	109
14	3,711	3,710	-	34	516	3,102	-	58
15-19	20,825	18,218	-	-	232	13,632	3,888	466
Total	67,847	61,857	9,402	23,792	6,820	17,175	3,888	780
Central City								
3,4	2,462	1,990	1,978	-	-	-	-	12
5	1,153	1,120	955	160	-	-	-	5
6-9	4,118	4,113	65	4,023	-	-	-	26
10-13	3,691	3,687	-	1,993	1,532	131	-	31
14	988	988	-	9	150	809	-	20
15-19	5,533	4,716	-	-	53	3,422	1,102	139
Total	17,945	16,614	2,998	6,185	1,735	4,362	1,102	233
Other SMSA								
3,4	3,798	2,740	2,738	-	-	-	-	2
5	1,825	1,795	1,527	260	-	-	-	8
6-9	6,912	6,906	61	6,800	-	-	-	45
10-13	6,219	6,213	-	3,227	2,742	199	-	45
14	1,579	1,578	-	15	187	1,355	-	21
15-19	8,762	7,918	-	-	69	5,953	1,723	173
Total	29,095	27,150	4,326	10,302	2,998	7,507	1,723	294
Outside SMSA								
3,4	2,657	1,103	1,090	-	-	-	-	13
5	1,287	1,083	926	150	-	-	-	7
6-9	4,802	4,796	61	4,706	-	-	-	29
10-13	4,387	4,382	-	2,439	1,798	111	-	34
14	1,145	1,144	-	11	179	937	-	18
15-19	6,529	5,584	-	-	110	4,256	1,064	154
Total	20,807	18,092	2,077	7,306	2,087	5,304	1,064	255

TABLE 9 (Cont.)

SERIES C - NORTHEAST REGION ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE
(In Thousands)

	1975							
	Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
NE Total								
3,4	1,730	693	689	-	-	-	-	4
5	821	776	634	138	-	-	-	4
6-9	3,218	3,214	61	3,128	-	-	-	25
10-13	3,720	3,716	-	1,884	1,642	153	-	37
14	986	985	-	10	131	826	-	18
15-19	4,770	4,064	-	-	31	2,966	958	109
Total	15,245	13,448	1,384	5,160	1,804	3,945	958	197
NE Central City								
3,4	545	233	231	-	-	-	-	2
5	252	236	185	50	-	-	-	1
6-9	958	957	38	912	-	-	-	7
10-13	1,124	1,123	-	581	482	49	-	11
14	291	291	-	3	53	229	-	6
15-19	1,465	1,171	-	-	15	855	266	35
NE Other SMSA								
3,4	825	348	348	-	-	-	-	-
5	388	370	300	68	-	-	-	2
6-9	1,558	1,556	16	1,528	-	-	-	12
10-13	1,795	1,793	-	890	811	74	-	18
14	486	485	-	5	54	418	-	8
15-19	2,272	2,022	-	-	11	1,460	499	52
NE Outside SMSA								
3,4	360	112	110	-	-	-	-	2
5	180	169	148	20	-	-	-	1
6-9	702	701	7	689	-	-	-	5
10-13	801	800	-	413	349	30	-	8
14	209	209	-	2	24	179	-	4
15-19	1,033	872	-	-	5	653	192	22

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TABLE 9 (Cont.)

SERIES C - NORTHEAST REGION ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE
(In Thousands)

1980

	Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
NE Total								
3,4	2,017	1,476	1,470	-	-	-	-	6
5	958	952	778	169	-	-	-	5
6-9	3,532	3,528	65	3,435	-	-	-	28
10-13	3,186	3,182	-	1,614	1,408	128	-	32
14	830	830	-	8	97	709	-	16
15-19	4,727	4,249	-	-	31	3,040	1,070	108
Total	15,250	14,217	2,313	5,226	1,536	3,877	1,070	195
NE Central City								
3,4	601	470	467	-	-	-	-	3
5	279	273	213	59	-	-	-	1
6-9	994	993	39	946	-	-	-	8
10-13	912	911	-	472	391	39	-	9
14	231	231	-	2	30	194	-	5
15-19	1,377	1,160	-	-	14	825	288	33
NE Other SMSA								
3,4	988	762	762	-	-	-	-	-
5	465	465	378	85	-	-	-	2
6-9	1,757	1,756	18	1,724	-	-	-	14
10-13	1,578	1,576	-	783	714	64	-	15
14	419	419	-	4	47	361	-	7
15-19	2,308	2,160	-	-	12	1,534	561	53
NE Outside SMSA								
3,4	427	242	240	-	-	-	-	2
5	214	214	188	25	-	-	-	1
6-9	781	780	8	766	-	-	-	6
10-13	696	695	-	360	303	25	-	7
14	180	180	-	2	20	154	-	4
15-19	1,042	929	-	-	5	682	220	22

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TABLE 9 (Cont.)

SERIES C - NORTH CENTRAL REGION ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE
(In Thousands)

	1975							
	Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
NC Total								
3,4	2,125	530	526	-	-	-	-	4
5	1,013	913	847	62	-	-	-	4
6-9	3,949	3,945	63	3,855	-	-	-	27
10-13	4,515	4,511	-	2,442	1,924	109	-	36
14	1,191	1,191	-	12	157	998	-	24
15-19	5,820	4,903	-	-	62	3,730	964	147
Total	18,613	15,993	1,436	6,371	2,143	4,837	964	242
NC Central City								
3,4	608	222	220	-	-	-	-	2
5	282	260	237	22	-	-	-	1
6-9	993	992	11	976	-	-	-	5
10-13	1,158	1,157	-	635	479	37	-	6
14	319	319	-	3	62	247	-	7
15-19	1,567	1,259	-	-	31	940	243	45
NC Other SMSA								
3,4	853	223	223	-	-	-	-	-
5	412	387	357	28	-	-	-	2
6-9	1,706	1,703	24	1,667	-	-	-	12
10-13	1,914	1,912	-	982	867	46	-	17
14	488	488	-	5	54	420	-	9
15-19	2,330	2,016	-	-	12	1,544	403	56
NC Outside SMSA								
3,4	664	85	83	-	-	-	-	2
5	319	266	253	12	-	-	-	1
6-9	1,250	1,249	28	1,213	-	-	-	8
10-13	1,443	1,442	-	825	578	26	-	13
14	384	384	-	4	41	331	-	8
15-19	1,923	1,629	-	-	19	1,247	317	46

TABLE 9 (Cont.)

SERIES C - NORTH CENTRAL REGION ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE
(In Thousands)

	Total Population	In School	1980 N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
NC Total								
3,4	2,474	1,261	1,255	-	-	-	-	6
5	1,183	1,119	1,035	78	-	-	-	6
6-9	4,347	4,342	67	4,247	-	-	-	28
10-13	3,852	3,848	-	2,077	1,646	93	-	32
14	992	992	-	10	116	846	-	20
15-19	5,622	4,965	-	-	47	3,739	1,035	144
Total	18,470	16,527	2,357	6,412	1,809	4,678	1,035	236
NC Central City								
3,4	680	474	472	-	-	-	-	2
5	316	305	277	27	-	-	-	1
6-9	1,044	1,042	11	1,028	-	-	-	5
10-13	947	946	-	518	392	31	-	5
14	256	256	-	3	36	212	-	5
15-19	1,451	1,218	-	-	20	902	252	44
NC Other SMSA								
3,4	1,039	578	578	-	-	-	-	-
5	502	494	454	38	-	-	-	2
6-9	1,956	1,954	27	1,913	-	-	-	14
10-13	1,700	1,698	-	872	770	41	-	15
14	422	422	-	4	46	364	-	8
15-19	2,350	2,139	-	-	12	1,615	456	56
NC Outside SMSA								
3,4	755	208	205	-	-	-	-	3
5	365	320	303	14	-	-	-	2
6-9	1,347	1,346	29	1,307	-	-	-	9
10-13	1,205	1,204	-	687	483	21	-	11
14	314	314	-	3	33	271	-	7
15-19	1,821	1,608	-	-	15	1,223	326	44

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TABLE 9 (Cont.)

SERIES C - SOUTH REGION ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE
(In Thousands)

				1975				
	Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
S Total								
3,4	2,378	758	748	-	-	-	-	10
5	1,134	757	612	141	-	-	-	4
6-9	4,477	4,473	19	4,428	-	-	-	26
10-13	5,215	5,210	-	2,892	2,153	131	-	34
14	1,382	1,381	-	19	322	1,024	-	16
15-19	6,511	5,175	-	-	176	3,995	863	141
Total	21,097	17,754	1,379	7,480	2,651	5,150	863	231
S Central City								
3,4	620	281	278	-	-	-	-	3
5	285	226	192	33	-	-	-	1
6-9	1,125	1,123	11	1,104	-	-	-	8
10-13	1,275	1,274	-	704	524	32	-	14
14	354	354	-	5	83	259	-	7
15-19	1,660	1,329	-	-	30	987	272	40
S Other SMSA								
3,4	717	284	283	-	-	-	-	1
5	351	276	222	53	-	-	-	1
6-9	1,384	1,383	7	1,369	-	-	-	7
10-13	1,622	1,620	-	869	704	39	-	8
14	408	408	-	5	57	343	-	3
15-19	1,890	1,552	-	-	57	1,214	251	30
S Outside SMSA								
3,4	1,041	194	188	-	-	-	-	6
5	498	255	198	55	-	-	-	2
6-9	1,968	1,966	-	1,956	-	-	-	10
10-13	2,318	2,316	-	1,320	924	60	-	12
14	620	619	-	9	183	421	-	6
15-19	2,961	2,294	-	-	89	1,794	340	71

TABLE 9 (Cont.)

SERIES C - SOUTH REGION ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE
(In Thousands)

1980

	Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
S Total								
3,4	2,753	1,760	1,748	-	-	-	-	12
5	1,320	1,135	904	224	-	-	-	7
6-9	4,957	4,952	41	4,885	-	-	-	26
10-13	4,564	4,560	-	2,525	1,886	119	-	30
14	1,213	1,212	-	13	211	974	-	14
15-19	6,613	5,515	-	-	144	4,238	991	142
Total	21,420	19,134	2,693	7,647	2,241	5,331	991	231
S Central City								
3,4	711	591	587	-	-	-	-	4
5	329	312	266	45	-	-	-	1
6-9	1,230	1,228	12	1,208	-	-	-	8
10-13	1,102	1,110	-	605	450	33	-	12
14	305	305	-	3	57	239	-	6
15-19	1,670	1,410	-	-	17	1,046	307	40
S Other SMSA								
3,4	891	680	678	-	-	-	-	2
5	439	418	327	87	-	-	-	4
6-9	1,647	1,645	8	1,629	-	-	-	8
10-13	1,526	1,525	-	818	663	37	-	7
14	386	386	-	5	48	330	-	3
15-19	2,062	1,763	-	-	41	1,380	309	33
S Outside SMSA								
3,4	1,151	489	483	-	-	-	-	6
5	552	405	310	93	-	-	-	2
6-9	2,080	2,077	21	2,047	-	-	-	9
10-13	1,936	1,934	-	1,101	771	50	-	10
14	521	520	-	5	106	404	-	5
15-19	2,881	2,343	-	-	86	1,814	374	69

TABLE 9 (Cont.)

SERIES C - WEST REGION ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE
(In Thousands)

1975

	Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
W Total								
3,4	1,380	593	590	-	-	-	-	3
5	659	615	537	76	-	-	-	2
6-9	2,578	2,574	13	2,547	-	-	-	14
10-13	2,934	2,931	-	1,569	1,249	93	-	20
14	770	770	-	4	106	651	-	9
15-19	3,703	3,176	-	-	10	2,421	677	68
Total	12,024	10,659	1,140	4,196	1,365	3,165	677	116
W Central City								
3,4	399	209	207	-	-	-	-	2
5	194	183	160	22	-	-	-	1
6-9	754	753	4	745	-	-	-	4
10-13	821	820	-	446	334	33	-	7
14	203	203	-	1	27	171	-	4
15-19	1,021	866	-	-	2	621	222	21
W Other SMSA								
3,4	699	307	307	-	-	-	-	-
5	330	321	282	39	-	-	-	-
6-9	1,282	1,281	6	1,269	-	-	-	6
10-13	1,479	1,478	-	789	638	44	-	7
14	399	399	-	2	53	341	-	3
15-19	1,883	1,629	-	-	4	1,272	325	28
W Outside SMSA								
3,4	281	76	75	-	-	-	-	1
5	135	111	95	15	-	-	-	1
6-9	542	541	3	534	-	-	-	4
10-13	634	633	-	334	277	16	-	6
14	168	168	-	1	27	138	-	2
15-19	799	682	-	-	4	530	129	19

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TABLE 9 (Cont.)

SERIES C - WEST REGION ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE
(In Thousands)

	Total Population	In School	1980 N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
W Total								
3,4	1,673	1,337	1,333	-	-	-	-	4
5	804	792	693	97	-	-	-	2
6-9	2,997	2,994	14	2,962	-	-	-	18
10-13	2,695	2,692	-	1,443	1,132	101	-	16
14	706	706	-	4	97	596	-	9
15-19	3,863	3,489	-	-	10	2,614	793	72
Total	12,738	12,010	2,040	4,506	1,239	3,311	793	121
W Central City								
3,4	471	455	453	-	-	-	-	2
5	229	229	200	28	-	-	-	1
6-9	851	850	4	841	-	-	-	5
10-13	731	730	-	398	298	30	-	4
14	203	203	-	1	27	171	-	4
15-19	1,036	929	-	-	2	651	254	22
W Other SMSA								
3,4	880	719	719	-	-	-	-	-
5	418	418	367	51	-	-	-	-
6-9	1,552	1,551	8	1,535	-	.	-	8
10-13	1,415	1,414	-	755	595	57	-	7
14	363	363	-	2	48	310	-	3
15-19	2,042	1,856	-	-	4	1,425	396	31
W Outside SMSA								
3,4	322	163	162	-	-	-	-	1
5	157	145	125	19	-	-	-	1
6-9	594	593	2	586	-	-	-	5
10-13	549	548	-	290	239	14	-	5
14	140	140	-	1	22	115	-	2
15-19	785	705	-	-	4	539	143	19

TABLE 9 (Cont.)

SERIES C - TOTAL UNITED STATES ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE
(In Thousands)

Note: Totals may not add due to rounding.

Source: Projected enrollment ratio's, 1975 and 1980; applied to the U.S. Department of Commerce,Bureau of the Census, Population Estimates and Projections 1970 to 2020, P25, No. 448, Series C, Table 2, Page 19.

Series C, 1975, 1980 adjusted by the relationship between the 1970 Series C Projections and the 1970 Advance Report of Population, PC(12).

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TABLE 9 (Cont.)

TOTAL UNITED STATES ENROLLMENT BY TYPE OF RESIDENCE AND LEVEL OF ATTENDANCE
(SERIES C ADJUSTED BY ADVANCED REPORT)
(In Thousands)

1975

	Adj. Series C Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
Total U.S.								
3,4	7,722	2,612	2,589	-	-	-	-	23
5	3,579	3,020	2,594	411	-	-	-	15
6-9	13,749	13,734	151	13,495	-	-	-	88
10-13	16,409	16,393	-	8,803	6,977	486	-	127
14	4,402	4,400	-	45	729	3,559	-	67
15-19	20,779	17,298	-	-	279	13,095	3,459	465
Total	66.640	57,457	5,334	22,754	7,985	17,140	3,459	785
Central City								
3,4	2,203	959	949	-	-	-	-	10
5	999	892	762	126	-	-	-	4
6-9	3,703	3,699	63	3,612	-	-	-	24
10-13	4,385	4,381	-	2,370	1,822	151	-	38
14	1,186	1,186	-	12	228	922	-	24
15-19	5,705	4,617	-	-	78	3,395	1,003	141
Total	18,181	15,734	1,774	6,120	2,128	4,468	1,003	241
Other SMSA								
3,4	3,139	1,180	1,179	-	-	-	-	1
5	1,463	1,338	1,148	185	-	-	-	5
6-9	5,734	5,728	51	5,640	-	-	-	37
10-13	6,819	6,812	-	3,535	3,024	203	-	50
14	1,811	1,810	-	17	222	1,548	-	23
15-19	8,366	7,210	-	-	84	5,482	1,478	166
Total	27,332	24,078	2,378	9,377	3,330	7,233	1,478	282
Outside SMSA								
3,4	2,380	474	463	-	-	-	-	11
5	1,117	790	684	101	-	-	-	5
6-9	4,313	4,308	37	4,244	-	-	-	27
10-13	5,204	5,199	-	2,897	2,131	132	-	39
14	1,406	1,405	-	16	279	1,090	-	20
15-19	6,708	5,470	-	-	117	4,217	978	158
Total	21,128	17,646	1,184	7,258	2,527	5,439	978	260

TABLE 9 (Cont.)

TOTAL UNITED STATES ENROLLMENT BY TYPE OF RESIDENCE AND LEVEL OF ATTENDANCE (SERIES C ADJUSTED BY ADVANCED REPORT) (In Thousands)

1980

	Adj. Series C Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
Total U.S.								
3,4	9,046	5,918	5,890	-	-	-	-	27
5	4,207	3,943	3,361	562	-	-	-	20
6-9	15,304	15,288	181	15,010	-	-	-	97
10-13	14,318	14,302	-	7,671	6,080	442	-	109
14	3,773	3,772	-	35	525	3,153	-	59
15-19	20,798	18,195	-	-	232	13,614	3,883	466
Total	67,446	61,418	9,432	23,278	6,837	17,209	3,883	778
Central City								
3,4	2,498	2,019	2,007	-	-	-	-	12
5	1,137	1,104	941	158	-	-	-	5
6-9	3,980	3,975	63	3,888	-	-	-	25
10-13	3,697	3,693	-	1,996	1,534	132	-	31
14	1,003	1,003	-	9	152	822	-	20
15-19	5,526	4,710	-	-	53	3,418	1,100	139
Total	17,841	16,504	3,011	6,051	1,739	4,372	1,100	232
Other SMSA								
3,4	3,853	2,780	2,778	-	-	-	-	2
5	1,800	1,771	1,507	256	-	-	-	8
6-9	6,681	6,675	59	6,573	-	-	-	43
10-13	6,228	6,222	-	3,232	2,746	199	-	45
14	1,606	1,606	-	15	191	1,379	-	21
15-19	8,751	7,907	-	-	69	5,944	1,721	173
Total	28,919	26,961	4,344	10,076	3,006	7,522	1,721	292
Outside SMSA								
3,4	2,695	1,118	1,105	-	-	-	-	13
5	1,270	1,068	913	148	-	-	-	7
6-9	4,642	4,636	59	4,549	-	-	-	28
10-13	4,393	4,388	-	2,442	1,801	111	-	34
14	1,164	1,163	-	11	182	952	-	18
15-19	6,521	5,578	-	-	110	4,252	1,062	154
Total	20,685	17,951	2,077	7,150	2,093	5,315	1,062	254

TABLE 9 (Cont.)

SERIES E - TOTAL UNITED STATES ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE

(ADJUSTED BY ADVANCE REPORT)
(In Thousands)

	Total Population	In School	1975 N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
U.S. Total								
3,4	6,862	2,321	2,301	-	-	-	-	20
5	3,298	2,783	2,390	379	-	-	-	14
6-9	13,746	13,731	151	13,492	-	-	-	88
10-13	16,408	16,392	-	8,802	6,977	486	-	127
14	4,403	4,401	-	45	729	3,560	-	67
15-19	20,782	17,300	-	-	279	13,097	3,459	465
Total	65,499	56,928	4,842	22,718	7,985	17,143	3,459	781
Central City								
3,4	1,958	852	843	-	-	-	-	9
5	921	822	702	116	-	-	-	4
6-9	3,702	3,698	63	3,611	-	-	-	24
10-13	4,385	4,381	-	2,370	1,822	151	-	38
14	1,186	1,186	-	12	228	922	-	24
15-19	5,706	4,618	-	-	78	3,396	1,003	141
Total	17,858	15,557	1,608	6,109	2,128	4,469	1,003	240
Other SMSA								
3,4	2,789	1,048	1,047	-	-	-	-	1
5	1,348	1,233	1,058	170	-	-	-	5
6-9	5,732	5,726	51	5,638	-	-	-	37
10-13	6,819	6,812	-	3,535	3,024	203	-	50
14	1,811	1,810	-	17	222	1,548	-	23
15-19	8,367	7,211	-	-	84	5,483	1,478	166
Total	26,866	23,840	2,156	9,360	3,330	7,234	1,478	282
Outside SMSA								
3,4	2,115	421	411	-	-	-	-	10
5	1,029	728	630	93	-	-	-	5
6-9	4,312	4,307	37	4,243	-	-	-	27
10-13	5,204	5,199	-	2,897	2,131	132	-	39
14	1,406	1,405	-	16	279	1,090	-	20
15-19	6,709	5,471	-	-	117	4,218	978	158
Total	20,775	17,531	1,078	7,249	2,527	5,440	978	259

TABLE 9 (Cont.)

SERIES E - TOTAL UNITED STATES ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE
(ADJUSTED BY ADVANCED REPORT)
(In Thousands)
1980

	Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
U.S. Total								
3,4	7,579	4,958	4,935	-	-	-	-	23
5	3,592	3,367	2,870	480	-	-	-	17
6-9	13,457	13,443	159	13,199	-	-	-	85
10-13	14,028	14,013	-	7,516	5,957	433	-	107
14	3,776	3,775	-	35	525	3,156	-	59
15-19	20,812	18,207	-	-	232	13,623	3,886	466
Total	63,244	57,763	7,964	21,230	6,714	17,212	3,886	757
Central City								
3,4	2,093	1,692	1,682	-	-	-	-	10
5	971	943	804	135	-	-	-	4
6-9	3,500	3,496	55	3,419	-	-	-	22
10-13	3,622	3,618	-	1,956	1,503	129	-	30
14	1,004	1,004	-	9	152	823	-	20
15-19	5,530	4,713	-	-	53	3,420	1,101	139
Total	16,720	15,466	2,541	5,519	1,708	4,372	1,101	225
Other SMSA								
3,4	3,228	2,329	2,327	-	-	-	-	2
5	1,537	1,512	1,286	219	-	-	-	7
6-9	5,875	5,870	52	5,780	-	-	-	38
10-13	6,102	6,096	-	3,167	2,690	195	-	44
14	1,607	1,607	-	15	191	1,380	-	21
15-19	8,757	7,913	-	-	69	5,949	1,722	173
Total	27,106	25,327	3,665	9,181	2,950	7,524	1,722	285
Outside SMSA								
3,4	2,258	937	926	-	-	-	-	11
5	1,084	912	780	126	-	-	-	6
6-9	4,082	4,077	52	4,000	-	-	-	25
10-13	4,304	4,299	-	2,393	1,764	109	-	33
14	1,165	1,164	-	11	182	953	-	18
15-19	6,525	5,581	-	-	110	4,254	1,063	154
Total	19,418	16,970	1,758	6,530	2,056	5,316	1,063	247

TABLE 9 (Cont.)

SERIES E - NORTHEAST REGION ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE
(ADJUSTED BY ADVANCED REPORT)
(In Thousands)

1975

	Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
NE Total								
3,4	1,560	625	621	-	-	-	-	4
5	747	706	576	126	-	-	-	4
6-9	3,110	3,106	59	3,023	-	-	-	24
10-13	3,725	3,721	-	1,887	1,644	153	-	37
14	1,003	1,002	-	10	133	841	-	18
15-19	4,765	4,060	-	-	31	2,963	957	109
Total	14,910	13,220	1,256	5,046	1,808	3,957	957	196
NE Central City								
3,4	491	210	208	-	-	-	-	2
5	230	215	168	46	-	-	-	1
6-9	926	925	37	881	-	-	-	7
10-13	1,126	1,125	-	582	483	49	-	11
14	296	296	-	3	54	233	-	6
15-19	1,463	1,169	-	-	15	853	266	35
NE Other SMSA								
3,4	744	314	314	-	-	-	-	-
5	353	337	273	62	-	-	-	2
6-9	1,506	1,504	15	1,477	-	-	-	12
10-13	1,797	1,795	-	891	812	74	-	18
14	494	493	-	5	55	425	-	8
15-19	2,270	2,020	-	-	11	1,458	499	52
NE Outside SMSA								
3,4	325	101	99	-	-	-	-	2
5	164	154	135	18	-	-	-	1
6-9	678	677	7	665	-	-	-	5
10-13	802	801	-	414	349	30	-	8
14	213	213	-	2	24	183	-	4
15-19	1,032	871	-	-	5	652	192	22

TABLE 9 (Cont.)

SERIES E - NORTHEAST REGION ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE
(ADJUSTED BY ADVANCED REPORT)
(In Thousands)
1980

	Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
NE Total								
3,4	1,714	1,254	1,249	-	-	-	-	5
5	807	802	655	143	-	-	-	4
6-9	3,002	2,999	55	2,920	-	-	-	24
10-13	3,126	3,122	-	1,584	1,381	126	-	31
14	845	845	-	8	99	722	-	16
15-19	4,724	4,246	-	-	31	3,038	1,069	108
Total	14,218	13,268	1,959	4,655	1,511	3,886	1,069	188
NE Central City								
3,4	511	400	397	-	-	-	-	3
5	235	230	179	50	-	-	-	1
6-9	845	844	33	804	-	-	-	7
10-13	895	894	-	463	384	38	-	9
14	235	235	-	2	31	197	-	5
15-19	1,376	1,159	-	-	14	824	288	33
NE Other SMSA								
3,4	840	648	648	-	-	-	-	-
5	392	392	318	72	-	-	-	2
6-9	1,493	1,492	15	1,465	-	-	-	12
10-13	1,548	1,546	-	768	700	63	-	15
14	427	427	-	4	48	368	-	7
15-19	2,307	2,159	-	-	12	1,533	561	53
NE Outside SMSA								
3,4	363	206	204	-	-	-	-	2
5	180	180	158	21	-	-	-	1
6-9	664	663	7	651	-	-	-	5
10-13	683	682	-	353	297	25	-	7
14	183	183	-	2	20	157	-	4
15-19	1,041	928	-	-	5	681	220	22

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TABLE 9 (Cont.)

SERIES E - NORTH CENTRAL REGION ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE

(ADJUSTED BY ADVANCED REPORT)
(In Thousands)
1975

	Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
NC Total								
3,4	1,915	478	474	-	-	-	-	4
5	921	830	770	56	-	-	-	4
6-9	3,817	3,813	61	3,727	-	-	-	25
10-13	4,522	4,518	-	2,446	1,927	109	-	36
14	1,211	1,211	-	12	160	1,015	-	24
15-19	5,814	4,898	-	-	62	3,726	963	147
Total	18,200	15,748	1,305	6,241	2,149	4,850	963	240
NC Central City								
3,4	548	200	198	-	-	-	-	2
5	256	236	215	20	-	-	-	1
6-9	960	959	11	943	-	-	-	5
10-13	1,160	1,159	-	636	480	37	-	6
14	324	324	-	3	63	251	-	7
15-19	1,565	1,257	-	-	31	938	243	45
NC Other SMSA								
3,4	769	201	201	-		-	-	
5	375	352	325	25	-	-	-	2
6-9	1,649	1,647	23	1,612	-	-	-	12
10-13	1,917	1,915	-	984	868	46	-	17
14	496	496	-	5	55	427	-	9
15-19	2,328	2,014	-	-	12	1,543	403	56
NC Outside SMSA								
3,4	598	77	75	-	-	-	-	2
5	290	242	230	11	-	-	-	1
6-9	1,208	1,207	27	1,172	-	-	-	8
10-13	1,445	1,444	-	826	579	26	-	13
14	391	391	-	4	42	337	-	8
15-19	1,921	1,627	-	-	19	1,245	317	46

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TABLE 9 (Cont.)

SERIES E - NORTH CENTRAL REGION ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE
(ADJUSTED BY ADVANCED REPORT)
(In Thousands)
1980

	Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
NC Total								
3,4	2,103	1,072	1,067	-	-	-	-	5
5	996	942	871	66	-	-	-	5
6-9	3,695	3,691	57	3,610	-	-	-	24
10-13	3,780	3,776	-	2,039	1,615	91	-	31
14	1,009	1,009	-	10	118	861	-	20
15-19	5,618	4,961	-	-	47	3,736	1,034	144
Total	17,201	15,451	1,995	5,725	1,780	4,688	1,034	229
NC Central City								
3,4	578	403	401	-	-	-	-	2
5	266	257	233	23	-	-	-	1
6-9	887	886	9	873	-	-	-	4
10-13	929	928	-	508	385	30	-	5
14	260	260	-	3	37	215	-	5
15-19	1,450	1,217	-	-	20	901	252	44
NC Other SMSA								
3,4	883	492	492	-	-	-	-	-
5	423	416	383	31	-	-	-	2
6-9	1,663	1,661	23	1,626	-	-	-	12
10-13	1,669	1,667	-	856	756	40	-	15
14	429	429	-	4	47	370	-	8
15-19	2,348	2,137	-	-	12	1,613	456	56
NC Outside SMSA								
3,4	642	177	174	-	-	-	-	3
5	307	269	255	12	-	-	-	2
6-9	1,145	1,144	25	1,111	-	-	-	8
10-13	1,182	1,181	-	675	474	21	-	11
14	320	320	-	3	34	276	-	7
15-19	1,820	1,607	-	-	15	1,222	326	44

TABLE 9 (Cont.)

SERIES E - SOUTH REGION ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE
(ADJUSTED BY ADVANCE REPORT)
(In Thousands)
1975

	Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
South Total								
3,4	2,143	683	674	-	-	-	-	9
5	1,031	688	556	128	-	-	-	4
6-9	4,327	4,323	18	4,280	-	-	-	25
10-13	5,223	5,218	-	2,897	2,156	131	-	34
14	1,406	1,405	-	19	328	1,042	-	16
15-19	6,504	5,169	-	-	176	3,989	863	141
Total	20,634	17,486	1,248	7,324	2,660	5,162	863	229
S Central City								
3,4	559	253	250	-	-	-	-	3
5	259	205	174	30	-	-	-	1
6-9	1,087	1,086	11	1,067	-	-	-	8
10-13	1,277	1,276	-	705	525	32	-	14
14	360	360	-	5	84	264	-	7
15-19	1,658	1,327	-	-	30	985	272	40
S Other SMSA								
3,4	646	256	255	-	-	-	-	1
5	320	252	203	48	-	-	-	1
6-9	1,338	1,337	7	1,323	-	-	-	7
10-13	1,624	1,622	-	870	705	39	-	8
14	415	415	-	5	58	349	-	3
15-19	1,888	1,550	-	-	57	1,212	251	30
S Outside SMSA								
3,4	938	174	169	-	-	-	-	5
5	452	231	179	50	-	-	-	2
6-9	1,902	1,900	-	1,890	-	-	-	10
10-13	2,322	2,320	-	1,322	926	60	-	12
14	631	630	-	9	186	429	-	6
15-19	2,958	2,292	-	-	89	1,792	340	71

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TABLE 9 (Cont.)

SERIES E - SOUTH REGION ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE
(ADJUSTED BY ADVANCED REPORT)
(In Thousands)
1980

	Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
South Total								
3,4	2,340	1,496	1,486	-	-	-	-	10
5	1,112	956	761	189	-	-	-	6
6-9	4,213	4,209	35	4,152	-	-	-	22
10-13	4,478	4,474	-	2,478	1,850	117	-	29
14	1,215	1,214	-	13	211	976	-	14
15-19	6,609	5,512	-	-	144	4,236	990	142
Total	19,967	17,861	2,282	6,832	2,205	5,329	990	223
S Central City								
3,4	604	502	499	-	-	-	-	3
5	277	263	224	38	-	-	-	1
6-9	1,045	1,044	10	1,027	-	-	-	7
10-13	1,081	1,080	-	594	442	32	-	12
14	306	306	-	3	57	240	-	6
15-19	1,669	1,409	-	-	17	1,045	307	40
S Other SMSA								
3,4	757	578	576	-	-	-	-	2
5	370	352	276	73	-	-	-	3
6-9	1,400	1,399	7	1,385	-	-	-	7
10-13	1,497	1,496	-	803	650	36	-	7
14	387	387	-	5	48	331	-	3
15-19	2,061	1,762	-	-	41	1,379	309	33
S Outside SMSA								
3,4	979	416	411	-	-	-	-	5
5	465	341	261	78	-	-	-	2
6-9	1,768	1,766	18	1,740	-	-	-	8
10-13	1,900	1,898	-	1,081	758	49	-	10
14	522	521	-	5	106	405	-	5
15-19	2,879	2,341	-	-	86	1,812	374	69

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TABLE 9 (Cont.)

SERIES E - WEST REGION ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE

(ADJUSTED BY ADVANCED REPORT)
(In Thousands)
1975

	Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
West Total								
3,4	1,244	535	532	-	-	-	-	3
5	599	559	488	69	-	-	-	2
6-9	2,492	2,489	13	2,462	-	-	-	14
10-13	2,938	2,935	-	1,572	1,250	93	-	20
14	783	783	-	4	108	662	-	9
15-19	3,699	3,173	-	-	10	2,419	676	68
Total	11,755	10,474	1,033	4,107	1,368	3,174	676	116
W Central City								
3,4	360	189	187	-	-	-	-	2
5	176	166	145	20	-	-	-	1
6-9	729	728	4	720	-	-	-	4
10-13	822	821	-	447	334	33	-	7
14	206	206	-	1	27	174	-	4
15-19	1,020	865	-	-	2	620	222	21
W Other SMSA								
3,4	630	277	277	-	-	-	-	-
5	300	292	257	35	-	-	-	-
6-9	1,239	1,238	6	1,226	-	-	-	6
10-13	1,481	1,480	-	790	639	44	-	7
14	406	406	-	2	54	347	-	3
15-19	1,881	1,627	-	-	4	1,270	325	28
W Outside SMSA								
3,4	254	69	68	-	-	-	-	1
5	123	101	86	14	-	-	-	1
6-9	524	523	3	516	-	-	-	4
10-13	635	634	-	335	277	16	-	6
14	171	171	-	1	27	141	-	2
15-19	798	681	-	-	4	529	129	19

TABLE 9 (Cont.)

SERIES E - WEST REGION ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE
(ADJUSTED BY ADVANCED REPORT)
(In Thousands)
1980

	Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
West Total								
3,4	1,422	1,136	1,133	-	-	-	-	3
5	677	667	583	82	-	-	-	2
6-9	2,547	2,544	12	2,517	-	-	-	15
10-13	2,644	2,641	-	1,415	1,111	99	-	16
14	707	707	-	4	97	597	-	9
15-19	3,861	3,488	-	-	10	2,613	793	72
Total	11,858	11,183	1,728	4,018	1,218	3,309	793	117
W Central City								
3,4	400	387	385	-	-	-	-	2
5	193	193	168	24	-	-	-	1
6-9	723	722	3	715	-	-	-	4
10-13	717	716	-	391	292	29	-	4
14	203	203	-	1	27	171	-	4
15-19	1,035	928	-	-	2	650	254	22
W Other SMSA								
3,4	748	611	611	-	-	-	-	-
5	352	352	309	43	-	-	-	-
6-9	1,319	1,318	7	1,304	-	-	-	7
10-13	1,388	1,387	-	740	584	56	-	7
14	364	364	-	2	48	311	-	3
15-19	2,041	1,855	-	-	4	1,424	396	31
W Outside SMSA								
3,4	274	138	137	-	-	-	-	1
5	132	122	106	15	-	-	-	1
6-9	505	504	2	498	-	-	-	4
10-13	539	538	-	284	235	14	-	5
14	140	140	-	1	22	115	-	2
15-19	785	705	-	-	4	539	143	19

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TABLE 9 (Cont.)

SERIES E - TOTAL UNITED STATES ENROLLMENT BY AGE AND LEVEL OF ATTENDANCE
(ADJUSTED BY ADVANCED REPORT)
(In Thousands)

Note: Totals may not add due to rounding.

Source: Projected enrollment ratios 1975, 1980, applied to the U.S. Department of Commerce, Bureau of the Census, Population Estimates and Projections, Series E, 1975-1980, P-25, No. 448, Table 2, p. 37, adjusted by the relationship between the 1970 Series E and the 1970 advance reports of population, PC(V2).

TABLE 9 (Cont.)

SERIES E - TOTAL UNITED STATES ENROLLMENT BY TYPE OF RESIDENCE AND LEVEL OF ATTENDANCE
(In Thousands)

1975

	Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
Total U.S.								
3,4	6,768	2,289	2,269	-	-	-	-	20
5	3,343	2,821	2,423	384	-	-	-	14
6-9	14,223	14,207	156	13,960	-	-	-	91
10-13	16,384	16,368	-	8,789	6,967	485	-	127
14	4,329	4,327	-	44	717	3,500	-	66
15-19	20,806	17,320	-	-	279	13,112	3,463	466
Total	65,853	57,332	4,848	23,177	7,963	17,097	3,463	784
Central City								
3,4	1,931	840	831	-	-	-	-	9
5	934	834	712	118	-	-	-	4
6-9	3,830	3,826	65	3,736	-	-	-	25
10-13	4,379	4,375	-	2,366	1,820	151	-	38
14	1,166	1,166	-	12	224	906	-	24
15-19	5,713	4,624	-	-	78	3,401	1,004	141
Total	17,953	15,665	1,608	6,232	2,122	4,458	1,004	241
Other SMSA								
3,4	2,751	1,034	1,033	-	-	-	-	1
5	1,366	1,249	1,072	172	-	-	-	5
6-9	5,931	5,925	53	5,834	-	-	-	38
10-13	6,809	6,802	-	3,529	3,020	203	-	50
14	1,781	1,780	-	17	218	1,522	-	23
15-19	8,377	7,220	-	-	84	5,490	1,480	166
Total	27,015	24,010	2,158	9,552	3,322	7,215	1,480	283
Outside SMSA								
3,4	2,086	415	405	-	-	-	-	10
5	1,043	738	639	94	-	-	-	5
6-9	4,462	4,457	38	4,391	-	-	-	28
10-13	5,196	5,191	-	2,892	2,128	132	-	39
14	1,382	1,381	-	16	274	1,071	-	20
15-19	6,717	5,478	-	-	117	4,224	979	158
Total	20,886	17,660	1,082	7,393	2,519	5,427	979	260

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TABLE 9 (Cont.)

SERIES E - TOTAL UNITED STATES ENROLLMENT BY TYPE OF RESIDENCE AND LEVEL OF ATTENDANCE
(In Thousands)

1980

	Total Population	In School	N or K	E 1-6	E 7,8	HS 9-12	College	Special Schools
Total U.S.								
3,4	7,476	4,891	4,868	-	-	-	-	23
5	3,642	3,414	2,910	487	-	-	-	17
6-9	13,926	13,912	165	13,659	-	-	-	88
10-13	14,012	13,997	-	7,507	5,950	433	-	107
14	3,711	3,710	-	34	516	3,102	-	58
15-19	20,825	18,218	-	-	232	13,632	3,888	466
Total	63,592	58,142	7,943	21,687	6,698	17,167	3,888	759
Central City								
3,4	2,065	1,669	1,659	-	-	-	-	10
5	985	957	816	137	-	-	-	4
6-9	3,622	3,618	57	3,538	-	-	-	23
10-13	3,616	3,612	-	1,953	1,500	129	-	31
14	988	988	-	9	150	809	-	20
15-19	5,533	4,716	-	-	53	3,422	1,102	139
Total	16,809	15,560	2,532	5,637	1,703	4,360	1,102	227
Other SMSA								
3,4	3,184	2,297	2,295	-	-	-	-	2
5	1,558	1,533	1,304	222	-	-	-	7
6-9	6,080	6,074	54	5,981	-	-	-	39
10-13	6,095	6,089	-	3,163	2,687	195	-	44
14	1,579	1,578	-	15	187	1,355	-	21
15-19	8,762	7,918	-	-	69	5,953	1,723	173
Total	27,258	25,489	3,653	9,381	2,943	7,503	1,723	286
Outside SMSA								
3,4	2,227	924	913	-	-	-	-	11
5	1,099	925	791	128	-	-	-	6
6-9	4,224	4,219	54	4,139	-	-	-	26
10-13	4,299	4,294	-	2,390	1,762	109	-	33
14	1,145	1,144	-	11	179	937	-	18
15-19	6,529	5,584	-	-	110	4,256	1,064	154
Total	19,523	17,090	1,758	6,668	2,051	5,302	1,064	248

Source: Projected ratios of enrollment for 1975, 1980, applied to the Department of Commerce, Bureau of the Census, Population Estimates and Projections, Series E, 1975, 1980, P-25, No. 448, Table 2, p. 37.

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SECTION 2

TENTATIVE PROJECTIONS OF ENROLLMENTS IN PUBLIC AND PRIVATE SCHOOLS

May 1971

TENTATIVE PROJECTIONS OF ENROLLMENTS IN PUBLIC AND PRIVATE SCHOOLS

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Table 1 - Percent in Private School, Total U.S., by Region and Type of Residence

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Table 3 - Projections of Percent Enrolled in Private Schools for 1975 and 1980, for the Total U.S., by Region and Type of Residence

Table 4 - Estimated School Enrollment, Public and Private, by Region and Type of Residence Within Region, 1970

Table 5 - Projections of School Enrollment, Public and Private, by Region and Type of Residence Within Region, Series E and Series C, 1975 and 1980

TENTATIVE PROJECTIONS OF ENROLLMENTS IN PUBLIC AND PRIVATE SCHOOLS

Conditions determining enrollments in private schools changed so drastically in the course of the past five years that it seems unrealistic to project into the future a long-term trend of enrollments. Hence, for the purposes of this short paper, we have assumed that changes in enrollments between 1967 and 1970, the four years for which data from the CPS is available, will continue for the next ten. This simplistic projection of past trends reflects the current crisis in private elementary and secondary education.

Current Enrollment in Private Schools

Table 1 shows percentages of children enrolled in public schools by type of residence for the total U.S. and its four regions. It will be noted that central cities generally have a higher proportion of children enrolled in private schools as compared to other metropolitan areas. In the non-SMSA's (with the exception of kindergarten), private schools play a very small role.

Only in the southern nursery schools is there considerable enrollment in non-public institutions. There, central cities with some 40 per cent of the total enrollment in private institutions are behind both the suburbs and the non-SMSA's.

In other areas of the country, only one-fifth of all suburban children enrolled in nursery schools are in public institutions. In the non-SMSA areas, roughly one-third are to be found there. The number and proportion of children accommodated by public nursery schools in the short run depends upon the Federal Government providing funds for pre-school services. Hence, it is not at all surprising that the concentration in central cities and the spotting of Headstart programs in rural areas results in a preponderance of public nursery education in those two areas of residence.

Public kindergarten is much more likely to be provided in the suburbs than either in the central cities or non-SMSA areas. The differences are small with some 16 per cent of the children in Kindergarten attending private schools in the suburbs, and 17.5 per cent being accommodated by private institutions in both central city and non-SMSA areas. Again, the provision of federal funds has much to do with those attendance rates. During the heyday of Headstart in 1968, public schools played a somewhat larger role in kindergarten attendance in central cities. The steam behind public enrollment of kindergarten seems to be building up in non-SMSA areas.

In elementary school, 18 per cent of all children in central cities could be expected to be attending private schools. In the suburbs somewhere between 12 and 12.5 per cent were accommodated by non-public institutions. In non-SMSA areas, private school was extremely rare,accounting for four per cent of the total attendance. Also for high school, a child in the central city was much more likely to attend a private school than one who lived either in the suburbs or a non-SMSA area. Thirteen per cent of all children in central cities in 1970 attended private schools. Only 8.5 per cent did in the suburbs and less than four per cent were so accommodated in non-SMSA areas.

Recent Trends in Private School Enrollments

In all three types of residences, private schools have been losing their share of enrollments. The losses have not been dramatic when measured in relation to total enrollment, but quite large when measured in terms of total private school attendance. Thus, for instance, private high schools which claimed 15 per cent of all high school children in 1967, lost 15 per cent of their share in the last four years. In the suburbs, the rate of decline was the same. Ten per cent of all eligibles were in private high schools in 1967, 15 per cent fewer were there in 1970. Similar losses were experienced in non-SMSA areas. While a decline of three to four per cent appears to be trivial on the surface, it is a big share of private enrollments. (Table 2)

Projections to 1975 and 1980

The projections for 1975 and 1980 were based on the straight-line extrapolation of those trends. In effect, the decrease in the share of enrollment in private schools was projected to continue for the next ten years. In most cases, the forecasts anticipate a sharp decline in private school enrollments. Thus, private central city high schools would only enroll nine and four per cent of all students in 1975 and 1980 respectively. Those in the suburbs would drop their participation from 8.5 per cent to 4.4 per cent between 1970 and 1975 and would be virtually eliminated by 1980. In the elementary schools, declines are likely to be steepest in the suburbs and quite considerable in the central city. In the suburbs, with the exception of junior high, private high school enrollments are projected to become very small. In the central city they are likely to decline from 18 per cent to 13.5 per cent of the total population. (Table 3).

The estimates of private school enrollments by region and type of residence are given in Tables 4 and 5. They have been scaled in relation to present attendance rates by region and the projected rates by type of residence. The 1975 and 1980 estimates are reported on the basis of both the Series E and Series C projections of population by the Census Bureau.

The total projections correspond to the projections based on long-range trends in the U.S. Office of Education for regular elementary schools. The additional enrollments in this study are accounted by higher estimates of enrollments in nursery schools.

TABLE 1

PERCENT IN PRIVATE SCHOOL, TOTAL U.S., BY REGION AND TYPE OF RESIDENCE

	1967 - 1969 Average Percent in Private Schools		
	Central City	Other SMSA	Non-SMSA
Total U.S.			
N or K	.268	.290	.279
E 1-6	.186	.143	.071
E 7,8	.190	.131	.064
HS 1-4	.152	.097	.038
Northeast			
N or K	.193	.249	.193
E 1-6	.312	.195	.125
E 7,8	.303	.184	.102
HS 1-4	.224	.127	.080
North Central			
N or K	.160	.200	.108
E 1-6	.194	.185	.117
E 7,8	.225	.172	.115
HS 1-4	.196	.129	.036
South			
N or K	.495	.626	.561
E 1-6	.100	.097	.031
E 7,8	.080	.159	.021
HS 1-4	.077	.061	.024
West			
N or K	.258	.211	.266
E 1-6	.116	.076	.040
E 7,8	.101	.064	.033
HS 1-4	.083	.044	.018

TABLE 2

RECENT DEVELOPMENTS IN PUBLIC SCHOOL ENROLLMENT

(Per Cent in Public School)

Central City	1970	1969	1968	1967
Nursery	.416	.398	.373	.418
Kindergarten	.826	.822	.838	.828
E 1-6	.825	.821	.809	.811
E 7,8	.814	.817	.810	.802
HS 1-4	.870	.861	.836	.848
Outside Central City				
Nursery	.232	.223	.242	.211
Kindergarten	.841	.835	.839	.811
E 1-6	.870	.874	.859	.837
E 7,8	.875	.875	.866	.867
HS 1-4	.915	.917	.897	.896
Outside SMSA				
Nursery	.302	.214	.377	.362
Kindergarten	.825	.794	.805	.785
E 1-6	.934	.935	.933	.918
E 7,8	.952	.941	.940	.928
HS 1-4	.961	.966	.960	.959

TABLE 3

PROJECTIONS OF PERCENT ENROLLED IN PRIVATE SCHOOLS FOR 1975 AND 1980, FOR THE TOTAL U.S., BY REGION AND TYPE OF RESIDENCE

	Central City		Other SMSA		Non-SMSA	
	1975	1980	1975	1980	1975	1980
Total U.S.						
N or K	.378	.455	.428	.526	.403	.498
E 1-6	.158	.132	.088	.050	.037	.028
E 7,8	.150	.125	.082	.043	.025	.010
HS 1-4	.095	.049	.050	.018	.015	.005
Northeast						
N or K	.272	.328	.368	.452	.279	.345
E 1-6	.265	.222	.120	.068	.065	.049
E 7,8	.239	.199	.115	.070	.040	.016
HS 1-4	.140	.072	.065	.024	.032	.013
North Central						
N or K	.226	.272	.295	.363	.156	.193
E 1-6	.165	.138	.114	.065	.061	.046
E 7,8	.178	.148	.108	.066	.045	.018
HS 1-4	.123	.063	.066	.024	.014	.005
South						
N or K	.544	.656	.685	.726	.613	.739
E 1-6	.085	.071	.060	.034	.016	.012
E 7,8	.063	.053	.100	.061	.008	.003
HS 1-4	.048	.025	.031	.011	.009	.003
West						
N or K	.364	.438	.311	.383	.384	.475
E 1-6	.098	.082	.047	.027	.021	.016
E 7,8	.080	.066	.040	.024	.013	.005
HS 1-4	.052	.027	.023	.008	.007	.002

TABLE 4

ESTIMATED SCHOOL ENROLLMENT, PUBLIC AND PRIVATE, BY REGION AND TYPE OF RESIDENCE WITHIN REGION, 1970

(in thousands)

Region	N or K		E 1-8		HS 1-4	
	Public	Private	Public	Private	Public	Private
NORTHEAST						
Central Cities	259	62	1,725	775	830	239
Other SMSA	342	114	2,850	677	1,466	213
Non-SMSA	167	40	1,423	192	689	60
TOTAL	768	216	5,998	1,644	2,985	512
NORTH CENTRAL						
Central Cities	323	62	2,133	540	978	238
Other SMSA	374	93	3,017	667	1,442	213
Non-SMSA	307	37	2,764	363	1,449	54
TOTAL	1,004	192	7,914	1,570	3,869	505
SOUTH						
Central Cities	166	162	2,539	267	1,097	92
Other SMSA	111	187	2,747	354	1,216	79
Non-SMSA	121	155	4,712	136	2,028	50
TOTAL	398	504	9,998	757	4,341	221
WEST						
Central Cities	185	64	1,443	182	678	61
Other SMSA	319	85	2,564	202	1,309	60
Non-SMSA	104	38	1,239	49	612	11
TOTAL	608	187	5,246	433	2,599	132
All Central Cities	933	350	7,840	1,764	3,583	630
All Other SMSA	1,146	479	11,178	1,900	5,433	565
All Non-SMSA	699	270	10,138	740	4,778	175
TOTAL U.S.	2,778	1,099	29,156	4,404	13,794	1,370

Source: Proportion of students in private schools (1967-69 average from CPS) was applied to 1970 total enrollment figures; cf., U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 215, (March 5, 1971) which estimated private enrollments at 6,418 thousand.

TABLE 5

SERIES E
(Adjusted by Advanced Report)

PROJECTIONS OF SCHOOL ENROLLMENT, PUBLIC AND PRIVATE, BY REGION AND TYPE OF RESIDENCE WITHIN REGION

1975

Region	N or K		E 1-6		E 7,8		HS 1-4	
	Public	Private	Public	Private	Public	Private	Public	Private
NORTHEAST								
Central Cities	301	112	1,111	401	420	132	976	159
Other SMSA	380	222	2,143	292	777	101	1,830	127
Non-SMSA	174	67	1,028	71	363	15	837	28
TOTAL	855	401	4,282	764	1,560	248	3,643	314
NORTH CENTRAL								
Central Cities	328	96	1,338	264	472	102	1,075	151
Other SMSA	387	162	2,327	299	834	101	1,883	133
Non-SMSA	280	52	1,890	123	611	29	1,585	23
TOTAL	995	310	5,555	686	1,917	232	4,543	307
SOUTH								
Central Cities	198	237	1,653	154	599	40	1,220	61
Other SMSA	146	319	2,111	135	738	82	1,550	50
Non-SMSA	135	213	3,219	52	1,191	10	2,260	21
TOTAL	479	769	6,983	341	2,528	132	5,030	132
WEST								
Central Cities	214	122	1,072	116	334	29	784	43
Other SMSA	372	168	1,957	96	669	28	1,623	38
Non-SMSA	97	60	848	18	304	4	681	5
TOTAL	683	350	3,877	230	1,307	61	3,088	86
All Central Cities	1,041	567	5,174	935	1,825	303	4,055	414
All Other SMSA	1,285	871	8,538	822	3,018	312	6,886	348
All Non-SMSA	686	392	6,985	264	2,469	58	5,363	77
TOTAL U.S.	3,012	1,830	20,697	2,021	7,312	673	16,304	839

TABLE 5 (Cont'd.)

SERIES E
(Adjusted by Advanced Report)

1980

Region	N or K		E 1-6		E 7,8		HS 1-4	
	Public	Private	Public	Private	Public	Private	Public	Private
NORTHEAST								
Central Cities	409	200	1,026	293	344	85	983	76
Other SMSA	538	443	2,152	157	707	53	1,917	47
Non-SMSA	242	127	977	50	317	5	852	11
TOTAL	1,189	770	4,155	500	1,368	143	3,752	134
NORTH CENTRAL								
Central Cities	468	175	1,213	194	377	65	1,074	72
Other SMSA	572	326	2,353	164	761	54	1,930	93
Non-SMSA	366	88	1,718	83	514	9	1,511	8
TOTAL	1,406	589	5,284	441	1,652	128	4,515	173
SOUTH								
Central Cities	252	481	1,544	118	489	27	1,284	33
Other SMSA	235	624	2,189	77	694	45	1,727	19
Non-SMSA	180	510	2,869	35	947	3	2,259	7
TOTAL	667	1,615	6,602	230	2,130	75	5,270	59
WEST								
Central Cities	312	244	1,038	93	300	21	827	23
Other SMSA	572	355	2,033	56	521	15	1,777	14
Non-SMSA	129	116	785	13	260	1	667	1
TOTAL	1,013	715	3,856	162	1,081	37	3,271	38
All Central Cities	1,441	1,100	4,821	698	1,510	198	4,168	204
All Other SMSA	1,917	1,748	8,727	454	2,683	167	7,351	173
All Non-SMSA	917	841	6,349	181	2,038	18	5,289	27
TOTAL U. S.	4,275	3,689	19,897	1,333	6,231	383	16,808	404

TABLE 5 (Cont'd.)

SERIES C
(Adjusted by Advanced Report)

1975

Region	N or K		E 1-6		E 7,8		HS 1-4	
	Public	Private	Public	Private	Public	Private	Public	Private
NORTHEAST								
Central Cities	331	123	1,136	410	419	131	974	159
Other SMSA	420	244	2,192	299	554	322	1,825	127
Non-SMSA	191	74	1,051	73	363	15	834	28
TOTAL	942	441	4,379	782	1,336	468	3,633	314
NORTH CENTRAL								
Central Cities	362	106	1,366	270	470	102	1,073	151
Other SMSA	426	178	2,376	306	832	101	1,877	133
Non-SMSA	57	307	1,929	125	609	29	1,582	22
TOTAL	845	591	5,671	701	1,911	232	4,532	306
SOUTH								
Central Cities	219	262	1,689	157	597	40	1,217	61
Other SMSA	161	351	2,158	138	736	82	1,547	49
Non-SMSA	149	237	3,287	53	1,186	10	2,255	20
TOTAL	529	850	7,134	348	2,519	132	5,019	130
WEST								
Central Cities	236	135	1,095	119	334	29	782	43
Other SMSA	410	185	2,000	99	667	28	1,619	38
Non-SMSA	107	66	865	19	304	4	679	5
TOTAL	753	386	3,960	237	1,305	61	3,080	86
All Central Cities	1,148	626	5,286	956	1,820	302	4,046	414
All Other SMSA	1,417	958	8,726	842	2,789	533	6,868	347
All Non-SMSA	504	684	7,132	270	2,462	58	5,350	75
TOTAL U. S.	3,069	2,268	21,144	2,068	7,071	893	16,264	836

TABLE 5 (Cont'd.)

SERIES C
(Adjusted by Advanced Report)

1980

Region	N or K Public	N or K Private	E 1-6 Public	E 1-6 Private	E 7,8 Public	E 7,8 Private	HS 1-4 Public	HS 1-4 Private
NORTHEAST								
Central Cities	483	236	1,151	328	348	87	982	76
Other SMSA	732	426	2,284	312	684	89	1,912	47
Non-SMSA	314	122	1,078	75	323	5	850	11
TOTAL	1,529	784	4,513	715	1,355	181	3,744	134
NORTH CENTRAL								
Central Cities	553	207	1,359	217	382	66	1,073	72
Other SMSA	675	384	2,643	184	773	55	1,972	48
Non-SMSA	433	104	1,918	93	521	10	1,507	8
TOTAL	1,661	695	5,920	494	1,676	131	4,552	128
SOUTH								
Central Cities	298	567	1,729	132	496	28	1,285	33
Other SMSA	278	735	2,453	86	706	46	1,728	19
Non-SMSA	212	602	3,207	39	960	3	2,261	7
TOTAL	788	1,904	7,389	257	2,162	77	5,274	59
WEST								
Central Cities	369	288	1,164	104	305	22	829	23
Other SMSA	675	419	2,280	63	631	16	1,778	14
Non-SMSA	153	139	882	14	264	1	667	1
TOTAL	1,197	846	4,326	181	1,200	39	3,274	38
All Central Cities	1,703	1,298	5,403	781	1,531	203	4,169	204
All Other SMSA	2,360	1,964	9,660	645	2,794	206	7,390	128
All Non-SMSA	1,112	967	7,085	221	2,068	19	5,285	27
TOTAL U. S.	5,175	4,229	22,148	1,647	6,393	428	16,844	359

SECTION 3

THE SUPPLY AND DEMAND FOR TEACHERS
1970, 1975 AND 1980

May 1, 1971

THE SUPPLY AND DEMAND FOR TEACHERS
1970, 1975 AND 1980

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THE SUPPLY AND DEMAND FOR TEACHERS
1970, 1975 AND 1980

Supply of Teachers

The total number of elementary and secondary classroom teachers has more than doubled during the past 20 years. In 1950, the total number of teachers numbered one million. By 1960, the number of teachers had increased to 1.5 million, and in 1970 some two million classroom teachers were estimated to be teaching in all elementary and secondary schools (including preschool and kindergarten).[1/] The total number of classroom teachers, aides, principals and auxiliary school personnel was estimated at 2.7 million.[2/]

Elementary and secondary school teachers are an important component of the total professional manpower of the United States. Approximately one-fifth of the total professional employment during the 1950 - 1970 period was accounted for by elementary and secondary school teachers. Among women professionals, this proportion was even higher. More than 40 percent of all professionals among women were accounted for by teachers. [See Table 1]

TABLE 1

CLASSROOM TEACHERS AND TOTAL PROFESSIONAL, TECHNICAL AND KINDRED WORKERS
(Thousands of Persons)

	1950			1960			1970		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Teachers	221	822	1,043	418	1,112	1,530	667	1,864	2,531
Total Professional, technical & kindred workers	2,970	1,951	4,921	4,479	2,753	7,232	6,781	4,422	11,203
Teachers as % of all professional, technical & kindred workers	7.4%	42.1%	21.2%	9.3%	40.3%	21.2%	9.8%	42.1%	24.1%

Sources: Figures for 1950 and 1960 are from U.S. Department of Commerce, Bureau of the Census, United States Summary, PC(1) 1D, Table 202. For 1970, total professional, technical and kindred workers are from U.S. Department of Labor, Bureau of Labor Statistics, Educational Attainment of Workers, Special Labor Force Report 125, unpublished tabulations; number of classroom teachers is from National Education Association, Research Division, Estimates of School Statistics, 1970-71, Research Report 1970-R15. Table 6, p.31.

Since teachers account for such a large proportion of the professional labor force, the supply of teachers has to be looked at in the light of the total supply of persons capable of filling professional positions. As an approximation of this figure, we shall use the supply of all persons with at least four years of college education. This is an extremely reasonable approximation, since some 98 percent of all teachers in public schools (accounting for 88 percent of all teachers) are college graduates.

Calculating the total supply of teachers for the next ten years is complicated not only by the uncertainty of estimating the future stock of college graduates (explained below), but also by changes in the fertility of the U. S. population. Since the majority of teachers are women, fewer children may mean fewer or shorter withdrawals from the labor force by college-educated women. In the past, teaching claimed more than its portion of beginning college graduates. Many beginning teachers either dropped out to raise families or found jobs in other occupations that were more lucrative or less demanding. Since we are likely to experience some softening in demand for persons with college degrees in the course of the next ten years, the mobility of professionals may be reduced considerably, and the supply of teachers may be even more ample than past trends indicate.

In light of the above considerations, it was decided to discuss the supply and demand for teachers in an iterative manner. First, an unconstrained supply projection will be presented. Second, a review of demand for teachers and other professionals will be constructed. Then, the two will be compared and some conclusions drawn about the probable employment patterns of elementary and secondary school personnel.

Supply of College Graduates

One of the most common observations about the U.S. population is that it is spending more time in school. The median educational attainment of the U.S. population, age 25 and over, has increased from 11.0 years in 1959 to 12.1 years in 1969, and 12.2 years in 1970. During this same time period, the numbers of persons with college degrees also continued to grow apace. Persons with four or more years of post-secondary education also grew 54 percent between 1959 and 1969.[3/] During that period some 3.0 million B.A. degrees were granted. In 1969-1970 alone, according to the U.S. Office of Education, 772 thousand B.A. degrees were conferred.[4/]

The time schedule of a person's education was never very carefully examined. It is generally assumed that the average high school graduate goes directly to college. The actual pattern of post-secondary education is less direct and linear.

According to the calculations of this study, somewhat less than two-thirds of the B.A. degrees were granted to persons after age 24 in the period 1959-1969. With the increased availability of financial aid during the past five years, one would expect that on the one hand highly-motivated students who dropped out for financial reasons would get their B.A.'s sooner, and on the other, the tendency to interrupt education could very well negate this trend. A comparison of the 1959-1963 experience with that of 1964-1968 is presented in Table 2.

Contrary to the impression that education became more non-linear and interrupted, our findings indicate that both for men and women college completion occurs at an earlier age.

TABLE 2

NUMBER OF B.A.'S GRANTED IN SELECTED PERIODS
(In thousands)

Years	Bachelor Degrees (thousands)	Percent Granted	
		Before Age 25	After Age 25
1959-60 to 1963-64	2,136	.29	.71
1964-65 to 1968-69	3,094	.37	.63
Total 1959-60 to 1968-69	5,230	.34	.66

Source: See footnote 3.

It is apparent that the potential supply of elementary and secondary teachers is fed by persons obtaining college degrees. This number has increased by 700 thousand in the course of the past five years alone. The most direct withdrawals from that stock are persons earning doctorates, who are not likely to teach at the elementary or secondary school level. As shown in the following table, Ph.D.'s are a small but increasing proportion of the stock of certificated people. In 1970, they accounted for about 2-1/2 percent of the total.

In the case of master's degree recipients, it will be noted that their numbers have increased dramatically as well. According to the U. S. Bureau of the Census, the number of persons with five years or more of college education increased from 2,846,000 in 1959 to 4,768,000 in 1969. The U.S. Office of Education estimates that the number of master's degrees granted in the 1959-1969 period was 1,441,000. In other words, 10.3 percent of the recipients of bachelor's degrees at the end of that period had received a master's degree.

If one is to assume that two-thirds of the doctorate recipients also obtained master's degrees, it is possible to compare the estimates for 1970 of the number of college graduates in the past decade from USOE and Census.

TABLE 3

STOCK OF CERTIFICATED PERSONS BY HIGHEST DEGREE HELD
(In Thousands)

	Total		
	1970	1975	1980
B.A.			
Male	6,183	7,369	8,783
Female	4,019	5,043	6,494
Total	10,202	12,412	15,277
M.A.			
Male	1,355	2,033	2,695
Female	821	1,245	1,654
Total	2,176	3,278	4,349
Ph.D.			
Male	270	415	573
Female	37	58	80
Total	307	473	653
All Degrees			
Male	7,808	9,817	12,051
Female	4,877	6,346	8,228
Total	12,685	16,163	20,279
Percent of Total			
B.A.	80.4%	76.8%	75.3%
M.A.	17.2%	20.3%	21.5%
Ph.D.	2.4%	2.9%	3.2%

Sources: U.S. Department of Commerce, Bureau of the Census, Historical Statistics of the United States, p. 211; Current Population Reports, "Educational Attainment, March 1970," Series P-20, #207.
U.S. Department of Health, Education, and Welfare, Office of Education, Projections of Educational Statistics to 1978-79, p. 41.
U.S. Department of Health, Education, and Welfare, Vital Statistics of the U.S., 1967, Vol. II, Section 5, Life Tables, Table 5-3.

Table 4 shows that these estimates are fairly close. The small differences may be accounted for by the fact that the Census Bureau does not count personnel in the Armed Forces stationed overseas.

During the past decade the education of elementary and secondary teachers generally followed the trends in achievement of the U.S. population as a whole. The proportion of public school teachers who did not have at least a Bachelor's degree declined from 14.6 percent of all public school teachers in 1960, to 3.6 percent in 1969. Similar information is not available for non-public school teachers. The proportion of public school teachers with a master's degree increased quite substantially, rising from 23.5 percent in 1960-61 to 30.3 percent in 1968-69. [5/]

The total number of college graduates in 1970 can be variously estimated at 13.4 million or 12.6 million, depending on how one wishes to calculate the stock of college-trained personnel. The U.S. Census Bureau estimates that 13.4 million persons have completed four years of college and uses this figure interchangeably with "college graduates." On the other hand, if one were to age the B.A. graduates estimated by USOE, an estimated 12.3 million of survivors of the previous years'

TABLE 4

COMPARISON OF USOE AND CENSUS ESTIMATES OF THE NUMBER OF COLLEGE GRADUATES

1959-60 to 1969-70

Years	B.A. USOE (Reported)	Four Years of College Census (Estimates)
1959-60 to 1963-64	2,136,337	2,417,000
1964-65 to 1969-70	3,110,352	3,344,000
1959-60 to 1969-70	5,246,689	5,759,000

Sources: USOE, see footnote 4.
Census, see footnote 3.

B.A. production is derived. The latter figure is probably closer to reality, since the sample surveys probably over-report years of school completed by 6 percent.[6] Thus, the "true" figure is somewhere between 12.6 and 13.4 million.

The 1970 stock was adjusted along the lines explained above. From the independent exercise to determine the number of survivors, it was estimated that 94.3 percent of men with four or more years of college were probably holders of a bachelor's degree. For women, the estimated proportion of bachelor degree holders is 89 percent.

The B.A. recipients by 1970 were aged to 1975 and 1980, and the number of survivors calculated. The same exercise was then performed for bachelor degree recipients between 1970 and 1980. Their ages were estimated, and survival rates to 1975 and 1980 were calculated accordingly. USOE estimates of the number of bachelor degree recipients were used for this purpose.[7] [See Table 5]

The total of survivors for 1970 degree recipients and those who earned their degrees between 1970 and 1980 were added together to estimate the stock with bachelor degrees for 1975 and 1980. The estimated number of bachelor degree holders shows 16.1 million in 1975 and 20.3 million in 1980.

TABLE 5

PROJECTED NEW B.A. RECIPIENTS TO BE ADDED TO STOCK OF B.A.'S IN 1975 and 1980, BY AGE

(In Thousands)

Age	1975	1980
Less than 25	1,693	2,256
25 - 29	1,840	2,244
30 - 34	328	281
35 - 44	147	94
45 - 54	85	59
55 - 64	31	20
65 or more	8	6
Total	4,132	4,960

Sources: Total degrees granted, see footnote 4; age distributions are projected from 1959 to 1970 trends, as reported for those with four or more years of college in U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-20, Numbers 99, 138, 194, 207, "Educational Attainment", March 1959, 1964, 1969, 1970.

Of the 12.7 million persons with B.A.'s in 1970 it can be roughly estimated that some 3.6 million have teacher credentials. A number of persons with teacher credentials are not likely to teach, having switched to other careers. Others are likely to have become administrators. Still others have temporarily or permanently withdrawn from the labor force. For example, in 1970, out of the 2.7 million teachers and administrators estimated to be employed by school systems, 92 thousand were teacher aides with no college education, while another 400 thousand were administrators and other personnel associated with schools. Probably 50 percent of these had teaching credentials. Thus, roughly 2.4 million teachers and administrators with teacher credentials were employed by public and private schools. Of these, 2.1 million teachers probably had B.A.'s, and the additional 200 thousand were administrators. The National Education Association estimates that 400 thousand or more teachers were not in the labor force, and 900 thousand, or 25 percent had chosen other careers. This estimate of 2.3 million teachers and administrators with B.A.'s is reasonable in light of estimates of 64 to 70 percent of recent graduates who have entered teaching careers.[8/]

The next problem was to estimate how many of the bachelor degree recipients were likely to participate in the civilian labor force. Employment rates for men do not differ strikingly for age groups 25 - 55 for either bachelor degree recipients or others. For those under 25, the participation rates in the civilian labor force is somewhat lower because (1) college-educated men delay their military obligations, and (2) bachelor degree recipients sometimes continue full-time graduate study. For this group, a labor participation rate based on past experience was calculated since no Bureau of Labor Statistics projected rates are available. For those over 55, labor participation rates projected by BLS were used.

A more complex estimating procedure was used to estimate the labor participation of women. The labor participation rate for college-educated women is higher than the average labor participation rate for all women. The projected rate was based on an estimate of labor participation of women by marital status with four or more years of college, residing in metropolitan areas.[9] The labor participation status of women was adapted from statistics of persons at work in non-agricultural industries.[10]

The employment rates for women were adjusted by (1) deriving a weighted average of labor participation of women in 1967 with four years of college by age group,[11] (2) estimating the 1970 participation based on the increase in labor participation of all women between 1967 and 1970,[12] (3) projecting it to 1970, 1975 and 1980, and (4) the new estimates for 1975 and 1980 were then scaled to BLS projections of labor participation of all women.[13] In other words, it was assumed that the labor participation of college-educated women would exceed the participation rate of all women by the same ratio throughout the period.

These adjustments were then tested for reasonableness in light of the declining birth rate. The number of children under five years of age declined by 25 percent during the 1960's, and is expected to decline another 15 percent in the 1970's. Since labor participation rates are directly affected by these developments, a reasonable test of the rate of change in labor participation rates in this light was made. The BLS projections were apparently either constructed by taking account of these developments, or were consistent with it. Thence, no further adjustments were made.

The projections of this study were then compared to the projections of BLS. This agency had projected the number of persons in the labor force by sex, age (for those over 25) and educational level for both 1975 and 1980. Using the calculated labor force participation, and inflating the totals, we arrived at relatively similar figures for the total of all males with four years of college in the labor force (within 700 thousand) or 7 percent in 1980, but were slightly further apart in estimating the number of women. By 1980, BLS figures for labor participation were 29 percent less than this study's. We feel that our figures are more up-to-date because: (1) they are based on the experience up to 1970, while the period for BLS projections ended at 1966-67 and did not take into account the higher number of women who obtained B.A.'s at a younger age during the late 1960's, and (2) BLS probably forecast lower production of bachelor degrees among women, even though the number of women obtaining bachelor degrees has been going up steadily. This study used USOE projections for bachelor degree production by sex, which took into account the rapid growth in the proportion of women completing a bachelor's degree.

Our best estimates of total bachelor degree recipients in the labor force is 11.9 million in 1975 and 14.9 million in 1980. The detailed breakdown and comparison with BLS estimates appear in Table 6.

TABLE 6

PROJECTIONS BY BLS AND THIS STUDY OF PERSONS WITH FOUR OR MORE YEARS OF COLLEGE IN THE POPULATION AND LABOR FORCE, 1975 AND 1980, BY SEX AND AGE

		Persons with 4+ Years of College (In Thousands)		Revised Labor Force Participation Rate	Persons in Labor Force (In Thousands)		
					BLS	This Study	
	1975	Adapted BLS 1/	USOE	(Percent)	4+ Years of College	4+ Years of College	B.A.
Male	Less than 25	N.A.	923	52.5	N.A.	485	457
	25 or more	8,694	9,046	86.4	7,511	8,065	7,605
	25-34	2,918	3,410	97.3	2,839	3,318	3,129
	35-44	1,975	2,284	97.0	1,916	2,215	2,089
	45-54	1,786	1,686	94.2	1,682	1,589	1,498
	55-64	1,015	930	82.1	833	764	720
	65 or more	1,000	736	24.3	243	179	169
Female	Less than 25	N.A.	925	63.0	N.A.	583	519
	25 or more	5,194	6,141	58.9	3,061	3,679	3,275
	25-34	1,982	2,485	61.1	1,211	1,519	1,352
	35-44	946	1,312	68.1	644	893	795
	45-54	845	993	71.5	604	709	631
	55-64	790	698	61.5	486	429	382
	65 or more	631	653	19.8	125	129	115
Total	Less than 25	N.A.	1,848	57.8	N.A.	1,068	976
	25 or more	13,888	15,187	76.4	10,610	11,744	10,380
	25-34	4,900	5,895	82.6	4,047	4,837	4,481
	35-44	2,921	3,596	87.9	2,567	3,108	2,884
	45-54	2,631	2,679	86.7	2,280	2,298	2,129
	55-64	1,805	1,628	72.9	1,315	1,193	1,102
	65 or more	1,631	1,389	22.4	366	308	284

1/ See p. 17.

TABLE 6 (Cont.)

PROJECTIONS BY BLS AND THIS STUDY OF PERSONS WITH FOUR OR MORE YEARS OF COLLEGE IN THE POPULATION AND LABOR FORCE, 1975 AND 1980, BY SEX AND AGE

1980		Persons with 4+ Years of College (In Thousands)		Revised Labor Force Participation Rate (Percent)	Persons in Labor Force (In Thousands)		
					BLS	This Study	
		Adapted BLS 1/	USOE		4+ Years of College	4+ Years of College	B.A.
Male	Less than 25	N.A.	1,225	52.5	N.A.	643	606
	25 or more	10,521	10,924	86.0	9,051	9,710	9,157
	25-34	3,721	4,351	97.6	3,632	4,246	4,004
	35-44	2,391	2,584	97.2	2,324	2,507	2,364
	45-54	1,848	1,835	94.1	1,739	1,734	1,635
	55-64	1,356	1,263	81.0	1,098	1,022	964
	65 or more	1,205	891	22.0	265	201	190
Female	Less than 25	N.A.	1,237	63.0	N.A.	779	693
	25 or more	5,530	7,917	70.0	3,873	4,997	4,448
	25-34	2,527	3,552	65.3	1,650	2,320	2,065
	35-44	1,260	1,741	71.3	898	1,240	1,104
	45-54	877	1,039	73.4	649	761	677
	55-64	793	784	66.3	526	520	463
	65 or more	73	801	19.4	142	156	139
Total	Less than 25	N.A.	2,462	57.8	N.A.	1,422	1,299
	25 or more	16,051	18,841	80.4	12,899	14,708	13,605
	25-34	6,248	7,903	84.4	5,273	6,566	6,069
	35-44	3,651	4,325	88.1	3,217	3,747	3,468
	45-54	2,725	2,874	87.7	2,389	2,495	2,312
	55-64	2,149	2,047	75.9	1,631	1,542	1,427
	65 or more	1,278	1,692	32.0	409	357	329

1/ Projected number in population calculated from Labor Force Participation Rates, Annual Average, Sophia C. Travis, "The U.S. Labor Force: Projections to 1985," Monthly Labor Review, May 1970, Table 1, p.4. Female rates have been adjusted upward by 29% in the 25-54 age groups, 32% in 55-64 age group, and 100% in the 65 or more age group to account for higher rates among college educated women in accordance with Malcolm S. Cohen, Samuel Rea, Jr. and Robert I. Lerman, A Micro Model of Labor Supply, BLS Staff Paper 4, 1970, p.79.

Demand for College Graduates

Generally, the bulk of college graduates is found in jobs either in professional occupations or in a Census classification called "managers, officials and proprietors." In 1960, 64 percent of persons with four or more years of college were classified among professional, technical and kindred workers. By 1970, an estimated 67 percent of all persons with the same educational attainment were in this category. Managers, etc. claimed 14 percent of all persons with four or more years of college education in 1960 and 17 percent in 1970. Thus, 80 percent of all persons with over four years of college education were employed in these two groups. Elsewhere, among sales, clerical and other workers, the proportion of persons with four or more years of college education to total employment did not vary significantly between 1960 and 1970. [See Table 7 and 7A]

Professional, Technical and Kindred Workers

The most mixed bag of occupations is found among professional, technical and kindred workers. The occupations covered by this classification are medical doctors, nurses, professors, teachers, research workers and technicians employed by industry. In 1960, it was estimated that the number of persons with bachelor degrees totalled 53 percent and in 1970, the proportion of holders of B.A.'s had increased to 59.8 percent.

TABLE 7

DISTRIBUTION OF PERSONS WITH FOUR OR MORE YEARS OF COLLEGE, BY OCCUPATION, 1960, 1965 AND 1970
(In Thousands)

	1960	1965	1970
Professional, Technical & Kindred Workers	7,232	9,054	11,203
With 4+ Years of College	3,856	5,331	6,699
% with 4+ Years	53.3%	58.9%	59.8%
Managers, Officials, (except farm)	5,410	7,499	8,259
With 4+ Years of College	850	1,330	1,658
% with 4+ Years	15.7%	17.7%	20.1%
Sales Workers	4,639	4,144	4,455
With 4+ Years of College	410	404	529
% with 4+ Years	8.8%	9.8%	11.9%
Clerical Workers	9,306	10,676	13,418
With 4+ Years of College	461	587	630
% with 4+ Years	5.0%	5.5%	4.7%
Other Occupations	34,870	36,389	38,323
With 4+ Years of College	420	475	482
% with 4+ Years	1.2%	1.3%	1.3%

TABLE 7A

PERSONS WITH FOUR OR MORE YEARS OF COLLEGE AS A PERCENT OF ALL EMPLOYED PERSONS WITH FOUR OR MORE YEARS OF COLLEGE

	1960 (Percent)	1965 (Percent)	1970 (Percent)
Professional, Technical & Kindred Workers	64.3	65.6	67.0
Managers, Officials, (except farm)	14.2	16.4	16.6
Sales Workers	6.8	5.0	5.3
Clerical Workers	7.7	7.2	6.3
Other Occupations	7.0	5.8	4.8
TOTAL	100.0	100.0	100.0

Source: 1960, U.S. Department of Commerce, Bureau of the Census, United States Summary, Occupational Characteristics PC(2)7A, pp.116-129.
1965 and 1970, U.S. Department of Labor, Bureau of Labor Statistics, Educational Attainment of Workers, Special Labor Force Reports 65 and 125, unpublished tabulations.

Demand for Teachers in Elementary and Secondary Education

The largest single group of professionals are teachers and administrators in elementary and secondary education. The prospects for their employment are directly related to enrollments in nursery, elementary and secondary schools. Future enrollments depend upon (1) the birth rate in the course of the next few years, and (2) the rate of increase in enrollment of the eligible population. The enrollment of most children age 10 to 17, is already well nigh universal. While there has been some increase in persistence in school among 18 year olds, the biggest changes in enrollment rates have occurred among three, four and five year olds.

Inasmuch as future enrollments in elementary and secondary schools depend on the future of the birth rate, the two limits of probable population growth are bounded by Projections C and E of the U.S. Bureau of the Census. In 1975, the difference between the two projections is very small, some 140 thousand three and four year olds. By 1980, the differences in the population projections are 4,254 thousand.

While the uncertainty with respect to enrollments in 1975 are squarely centered in the projection of attendance rates of children under six, in 1980 the projections are affected by the birth rate as well. Enrollment estimates are discussed at greater length in another report. Suffice it to say, the number of children enrolled will probably number 53-54 million in 1975, and in 1980 low enrollments may number 51 million, while the figure may go as high as 57 million. All the difference in 1975 and half of the difference between high and low enrollment estimates in 1980 is due to different projections of enrollment patterns of pre-schoolers. The other half of the difference in 1980 is due to differences in projected birth rates. [See Table 8]

According to preliminary Census counts, nursery, elementary and secondary school enrollments in 1970 numbered 53 million. Thus, the total demand for teachers in the next decade may (1) be no more than it is today if pupil/teacher ratios remain constant, and the low enrollment projection is the one which describes the future, (2) grow just slightly in line with past trends if enrollment stays low, (3) increase somewhat more as the number of over-crowded classrooms decreases and special services are provided, (4) increase if enrollments in private schools decline, since classes in non-public schools are larger, or (5) reach 200 thousand more than estimated below, only if the birth rates stop their decline.

In realistic terms, it is unlikely that by 1980 total number of teachers would exceed 2,900 to 3,000 thousand. If enrollments are high, services might be cut down, and if

TABLE 8

PROJECTED ENROLLMENT IN ELEMENTARY AND SECONDARY SCHOOLS FOR TOTAL U.S.
1975 AND 1980, SERIES C AND SERIES E
(In Thousands)

	Projected 1975		
	% of Population in Schools	Series C Enrollment 1/	Series E Enrollment
3-4 Years	34.0%	2,588	2,301
5 Years	85.5	3,102	2,858
6-9 Years			14,209
10-13 Years	99.9	34,902	16,367
14 Years			4,325
15-19 Years	81.9	17,040	17,037
Total 3-19 Years	86.0%	57,632	57,097
Less College		3,412	3,412
Total Elementary & Secondary		54,220	53,685

TABLE 8 (Cont.)

PROJECTED ENROLLMENT IN ELEMENTARY AND SECONDARY SCHOOLS FOR TOTAL U.S.
1975 AND 1980, SERIES C AND SERIES E
(In Thousands)

	Projected 1980					
	Percent of Population in Schools		Series C Enrollment		Series E Enrollment	
	H 1/	T 1/	H 1/	T 1/	H 1/	T 1/
3-4 Years	65.6%	31.8%	5,850	2,836	4,907	2,369
5 Years	93.8		4,001		3,418	
6-9 Years					13,912	
10-13 Years	99.9		33,805		13,998	
14 Years					3,707	
15-19 Years	84.5		17,597		17,598	
Total 3-19 Years			61,253	58,239	57,540	55,002
Less College			3,852	3,852	3,852	3,852
Total Elementary & Secondary			57,401	54,387	53,688	51,150

1/ Alternate projections for higher population growth or enrollment, (H) and continuation of trend (T).

Source: Projected on basis of decennial census 1950, 1960 and one percent Current Population Survey Sample for 1970.

enrollments are low, it is quite likely that service levels would be increased. A more detailed projection of teacher demand will be included with the detailed enrollment projection. At this time, we have adopted a figure midway between these two estimates -- 2,950,000 teachers and administrators in 1980.

It was further assumed that by 1980 the number of teachers without B.A.'s would be reduced considerably. The only persons who will not have completed college and would be teaching are an estimated 100 thousand teacher aides. From unpublished Census statistics, we estimate teacher aides in 1970 to number 80 thousand. [See Table 9]

College Professors and Administrators - For this report, we have estimated college professors and administrators engaged in instruction separately from the number of college and university-employed personnel engaged in research and development activities. Also, the figures referred to in this study are for full-time employees rather than for total or full-time equivalent staff.

The reasons for this departure from the normal way of counting faculty are two-fold: (1) the rate of increase in post-secondary enrollments is likely to be quite different from the rate of increase in research funds, and (2) we must

TABLE 9

PROFESSIONAL, TECHNICAL AND KINDRED WORKERS BY TYPE OF ACTIVITY AND DEGREE STATUS
1960, 1970, 1975 AND 1980
(In Thousands)

	Actual		Projected	
	1960	1970	1975	1980
Total Civilian Labor Force	65,894	78,120	86,832	94,751
Professional & Technical Workers	7,232	11,203	12,817	15,041
% Civilian Labor Force	11.0%	14.3%	14.8%	15.9%
Professional & Technical Workers				
With 4+ Years of College	3,856	6,699	8,547	10,395
% with 4+ Years of College	52.5%	59.7%	66.7%	69.1%
Estimated with B.A.'s	3,538	6,343	7,768	9,448
% with B.A.'s	48.2%	56.6%	60.6%	62.8%
B.A. Recipients				
Elementary & Secondary Teachers	1,155	2,337	2,594	2,850
College Professors & Administrators	160	332	433	464
Medical Personnel	526	763	1,000	1,235
R&D Personnel	403	645	695	738
Others	1,392	2,256	3,126	4,161

TABLE 9 (Cont.)

PROFESSIONAL, TECHNICAL AND KINDRED WORKERS BY TYPE OF
ACTIVITY AND DEGREE STATUS
1960, 1970, 1975 AND 1980
(In Thousands)

	Actual		Projected	
	1960	1970	1975	1980
Professional & Technical Workers				
Non-B.A. Recipients	3,694	4,504	5,049	5,593
Elementary & Secondary Teachers	375	323	211	100
Medical Personnel	761	940	1,088	1,235
R&D Personnel	166	274	291	307
Others	2,392	2,967	3,473	3,979

Sources: Total Civilian Labor Force 1960, see footnote 1, p.1-487; 1970, see footnote 10, p.31; 1975 and 1980 see footnote 13, p.A5, Educational Attainment, Elementary and Secondary Teachers, Medical and Other Personnel, 1960 U.S. Bureau of the Census, ibid, see footnote 15, 1970, Bureau of Labor Statistics, see footnote 15, College Professors and Administrators and R&D Personnel, see text.

take care not to double count those persons who have jobs in industry or government and who teach part-time.

Our estimate of full-time faculty and administrators with college degrees is 332 thousand for 1970. (In addition, another 55 thousand equivalent academic man-years were spent in research and development.) By 1980, using USOE projections of full-time equivalent students, and assuming that the past trend of one faculty member and administrator is added for each 18 additional students, we can expect 433 thousand and 464 thousand administrators and faculty members to be employed full-time by institutions of higher education in 1970 and 1980.

Medical Personnel - We estimated that medical personnel with college degrees increased 42 percent during the past decade. In anticipation of broader medical coverage, we expect this past trend to continue. In the next 10 years, the demand for physicians will increase 53 percent, dentists 32 percent, dieticians 40 percent, etc.[14/] While total medical personnel was projected to grow 45 percent, those with bachelor degrees increased by 60 percent, in line with past trends. In 1960, only 41 percent of all medical personnel had a Bachelor's degree, in 1970 the proportion was 45 percent.[15/] It was projected to be 50 percent in 1980. Thus, employment in the medical field of persons with bachelor degrees, was projected to increase from 763 thousand in 1970 to 1,000 thousand in 1975, and 1,235 thousand in 1980.

Research and Development Personnel - The full-time equivalent employment of scientific personnel has been estimated by National Science Foundation for various years between 1954 and 1968. The definition of scientist by the Foundation is fairly broad and includes not only physical and life scientists, but also social scientists and psychologists. To the full-time equivalent research effort in physical science, we added an additional five percent for research in education and the humanities.

The 1960 estimated employment was interpolated from available data, and the 1970 figure was projected. The estimates for 1975 and 1980 were derived as a by-product of another study performed by Joseph Froomkin for the National Science Foundation.[16/] The report assumed that three percent of the Gross National Product was to be devoted to research and development, and that past trends in cost increases would continue. Five percent additional personnel was added to the figures of research scientists in that report to arrive at an estimate of 675 and 738 thousand research and development employees in 1975 and 1980 respectively.

Managers, Officials and Proprietors - The other major source of employment of persons with bachelor degrees, namely, the managerial category has shown considerable growth in openings for persons with bachelor degrees. While the total number of self-employed proprietors has declined, managers and proprietors of larger businesses have grown apace. The two trends have cancelled each other out, and while the total number of managers, proprietors and officials has remained fairly constant as a proportion of the labor force, the share of bachelor degree recipients has grown 50 percent during the last decade. This trend is likely to continue, and an additional 1.2 million jobs for college graduates in the next decade are likely to open up for college graduates in this category. Total job opportunities are expected to number 2.2 million in 1975 and 2.8 million in 1980. [See Table 10]

Other Employment of Persons with Bachelor Degrees

The proportion of college graduates in other categories grew proportionately to employment. It has been so projected. In 1975, 1.8 million jobs are projected to be filled by college graduates in sales, clerical and other occupations. By 1980, the number of college graduates in these occupations is likely to number 2.0 million.

Total Demand for College Graduates -- A Test of Reasonableness of Estimates

We estimate that job opportunities in the civilian labor force will total 11.7 million in 1975 and 14.2 million in 1980. These estimates can be checked for internal con-

TABLE 10

PROJECTED DISTRIBUTION OF COLLEGE GRADUATES BY OCCUPATIONS, 1975 AND 1980
(In Thousands)

	This Study				BLS Projections	
	1975		1980		1980	
	Total Employed	College 1/ Graduates	Total Employed	College 1/ Graduates	Total Employed	College 2/ Graduates
Professional, Technical & Kindred Workers	12,817	7,768	15,041	9,448	15,500	10,230
Managers & Officials (except farm)	9,200	2,180	10,150	2,770	9,500	2,850
Sales Workers	4,949	585	5,401	688	6,000	780
Clerical Workers	15,630	711	17,403	819	17,300	779
All Other Occupations	41,679	474	45,480	517	46,800	703
TOTAL	84,275	11,718	93,475	14,242	95,100	15,342

1/ Persons with B.A. Degrees.
2/ Persons over 18 years of age with four or more years of college

Sources: 1970, U.S. Department of Labor, Bureau of Labor Statistics, Educational Attainment of Workers, Special Labor Force Report 125, unpublished tabulations.
1980, U.S. Department of Labor, Bureau of Labor Statistics, The U.S. Economy in 1980, A Summary of BLS projections, Bulletin 1673, p.35.

sistency in the case of professionals, and with a similar BLS projection for the aggregate. [See Table 10]

In the case of professional and technical workers, the proportion of persons with Bachelor's degrees increased from 48 to 57 percent between 1960 and 1970. Our estimates continue this trend with the proportion of college graduates increasing 61 and 63 percent by 1975 and 1980. The slowing down of the growth is reasonable in light of the tapering off of research and development, college enrollments and the exhaustion of opportunities to replace elementary and secondary teachers without Bachelor's degrees by teachers with Bachelor's degrees.

In total, these estimates compare fairly closely with estimates of the BLS also labelled college graduates, but which really refer to those persons who have completed four years of college education. The BLS estimates 15.3 million job openings for persons with four years of college in 1980.

If this figure is reduced by six to eight percent in order to deduct from BLS estimates the number of persons with four years of college (but without a college degree), the estimates of this study come unusually close to those of the BLS, i.e. 14.2 million versus 14.1 - 14.4 million.

The Conditions of Demand and Supply - 1975, 1980

Earlier we estimated that the total supply of persons with college degrees who would participate in the labor force would be 11.8 million in 1975, and 14.9 million in 1980. The demand projections place the number of college-educated personnel at 11.7 million in 1975 and 14.2 million in 1980. Thus, the supply will exceed the demand by 1.0 percent in 1975, and by some 4.9 percent in 1980.

Teacher Availability and Demand -- Demographic Analysis

Whatever information we have about the age composition of classroom teachers leads us to the conclusion that the entry and exit rates of teachers by age have not changed drastically in the last 20 years. For instance, a projection based on the 1950 - 1960 experience forecasts fairly accurately the age composition of teachers in 1969.[17/]

This stability in entry and exit rates by age is unusual in the teaching profession. The age composition of teachers changed drastically between 1930 and 1960. In the 1930's more than 25 percent of the female teachers were under the age of 25, and the share of teachers in older age groups declined steadily as age increased. In the 1950's and 1960's, with the population explosion and the increasing demand for teachers, the number of young teachers increased and the number of older teachers started peaking again after the age of 35. The teaching profession provided an opportunity for the re-employment of women who dropped out of the labor force to raise children and then re-entered it later in life to teach school.

By contrast, in the case of males, a significant number of young college graduates entered teaching but then were siphoned off to other occupations or administrative duties in the schools. The peak employment of males occurred in the youngest age groups and declined steadily as the male teaching age increased.

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Between 1970 and 1975, if past rates of entry into the profession were to continue, the total number of teachers available would increase to 3.0 million. Again, if the patterns of the past few years were to be extended to 1980, as many as 3.5 million teachers would be available to teach school. The distribution of teachers by age, based on past trends, appears in Table 11. It is significant that despite this rapid growth in the number of teachers the proportion of college graduates in the teaching profession would roughly be the same in 1980 as in 1970. In 1975, the proportion of teachers to college graduates would have become 18.7 percent compared with 18.5 and 18.4 percent at the beginning and end of this decade.

Our projections indicate that many fewer teachers will be required both in 1975 and by the end of the decade. Fairly generous estimates of teacher demand place total college trained teachers at 2.6 million and 2.9 million in 1975 and 1980 respectively. In other words, roughly 400 thousand persons who would have found teaching jobs, if past trends were to continue, will have to find different occupations by 1975 and their numbers will swell to nearly 600 thousand by 1980.

Representatives of teacher groups and officials of teacher associations believe that the balance between the traditional influx of persons into the teaching profession and the number demanded will come about in two ways: (1) the

TABLE 11

DISTRIBUTION OF TEACHERS BY AGE, 1960, 1970 AND PROJECTED DISTRIBUTION OF TEACHERS, 1975, 1980, BASED ON CONTINUATION OF PAST TRENDS

(In Thousands)

	Actual					
	1960			1970		
Age	Male	Female	Total	Male	Female	Total
20-24	34	129	163	76	272	348
25-29	85	120	205	136	231	367
30-34	81	97	178	114	143	257
35-39	61	99	160	119	153	272
40-44	41	124	165	84	160	244
45-49	36	150	186	59	150	209
50-54	34	167	201	38	161	199
55-59	24	121	145	31	155	186
60-64	14	65	79	25	145	170
65+	8	40	48	17	64	81
	418	1,112	1,530	699	1,634	2,333

PERCENT AGE DISTRIBUTION

Age	Male	Female	Total	Male	Female	Total
20-24	8.1%	11.6%	10.7%	10.9%	16.7%	14.9%
25-29	20.3	10.8	13.4	19.5	14.1	15.7
30-34	19.4	8.7	11.6	16.3	8.8	11.0
35-39	14.6	8.9	10.5	17.0	9.4	11.7
40-44	9.8	11.2	10.8	12.0	9.8	10.5
45-49	8.6	13.5	12.2	8.4	9.2	9.0
50-54	8.1	15.0	13.1	5.4	9.9	8.5
55-59	5.8	10.9	9.5	4.4	9.5	8.0
60-64	3.4	5.8	5.2	3.6	8.9	7.3
65+	1.9	3.6	3.1	2.4	3.9	3.5
Total	100.0%	100.0%	100.1%	99.9%	100.2%	100.1%

TABLE 11 (Cont.)

DISTRIBUTION OF TEACHERS BY AGE, 1960, 1970 AND PROJECTED DISTRIBUTION OF TEACHERS, 1975, 1980, BASED ON CONTINUATION OF PAST TRENDS

(In Thousands)

	Projected					
	1975			1980		
Age	Male	Female	Total	Male	Female	Total
20-24	104	348	452	139	466	605
25-29	167	405	572	229	428	657
30-34	167	231	398	169	288	457
35-39	128	153	281	171	268	439
40-44	123	191	314	111	215	326
45-49	78	194	272	109	210	314
50-54	54	165	219	71	189	260
55-59	34	161	195	46	141	187
60-64	25	133	158	26	127	153
65+	25	139	164	22	126	148
Total	905	2,120	3,025	1,088	2,458	3,546

PERCENT AGE DISTRIBUTION

Age	Male	Female	Total	Male	Female	Total
20-24	11.5%	16.4%	14.9%	12.8%	19.0%	17.0%
25-29	18.5	19.1	18.9	21.0	17.4	18.5
30-34	18.5	10.9	13.2	15.5	11.7	12.9
35-39	14.1	7.2	9.3	15.7	10.9	12.4
40-44	13.6	9.0	10.4	10.2	8.7	9.2
45-49	8.6	9.2	9.0	10.0	8.5	8.9
50-54	6.0	7.8	7.2	6.5	7.7	7.3
55-59	3.8	7.6	6.4	4.2	5.7	5.3
60-64	2.7	6.3	5.2	2.3	5.2	4.3
65+	2.7	6.6	5.4	2.0	5.1	4.2
Total	100.0%	100.1%	99.9%	100.2%	99.9%	100.0%

opportunity for women to return to teaching in their mid-years will be drastically reduced, and (2) only a fraction of the college graduates who would have traditionally chosen teaching will find jobs in the classroom.

For purposes of projection, we have assumed that the entry and exit rates of male teachers will remain the same in the course of the next 10 years, and that entry rates of older females will be altered drastically and resemble the entry and exit rates of males. In other words, some 61 thousand female teachers between the ages of 45 and 49, who would have been expected to be employed in schools in 1975, will have to find other jobs.

This adjustment is not sufficient to balance the demand or the supply. In addition to these draconian reductions in the employment of older teachers, it was also necessary to cut down the entry rates of males and females under the age of 35 by 30 percent. [See Table 12]

These reductions will mean very substantial differences in the careers of young persons. If 22 percent of all employed male B.A. graduates in the 1960's and 1970's found jobs as teachers, only 15 percent will be placed in classrooms in 1975 and 1980. The reduction of job opportunities for young B.A.'s is even going to be more drastic for women. Traditionally, 67 percent of all women with B.A.'s under the age of 25 in the

TABLE 12

PROJECTED DISTRIBUTION OF TEACHERS BY AGE ADJUSTED TO FIT PROJECTED DEMAND
1975 AND 1980
(In Thousands)

	1975			1980		
Age	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
20-24	73	242	315	97	323	420
25-29	117	284	401	153	364	517
30-34	167	231	398	169	202	371
35-39	128	153	281	171	268	439
40-44	123	158	281	111	139	250
45-49	78	149	227	104	133	237
50-54	54	137	191	71	134	205
55-59	34	161	195	46	141	187
60-64	25	133	158	26	127	153
65+	25	139	164	22	126	148
Total	824	1,787	2,611	970	1,957	2,927
			PERCENT AGE DISTRIBUTION			
	8.9%	13.5%	12.1%	10.0%	16.5%	14.3%
	14.2	15.9	15.4	15.8	18.6	17.7
	20.3	12.9	15.2	17.4	10.3	12.7
	15.5	8.6	10.8	17.6	13.7	15.0
	14.9	8.8	10.8	11.4	7.1	8.5
	9.5	8.3	8.7	10.7	6.8	8.1
	6.6	7.7	7.3	7.3	6.9	7.0
	4.1	9.0	7.5	4.7	7.2	6.4
	3.0	7.4	6.1	2.7	6.5	5.2
	3.0	7.8	6.3	2.3	6.4	5.1
	100.0%	99.9%	100.2%	99.9%	100.0%	100.0%

labor force are teachers.[18/] Some 47 percent (or 20 percent less), will be so employed in 1975 and 1980. The implications of these new employment patterns are probably not going to be wasted on the labor market, and job opportunities, especially for young people, will be unfavorably affected by the shift in demand for teachers.

Professional, Teacher, and Other Wage Developments - In the course of the last 10 years between 1960 and 1969, all wages increased in real terms at the rate of 2.4 percent. Male wages, which are a better indicator of total wage trends because total wage trends are affected by part-time wages of women, grew 2.8 percent in real terms. During the same period, all professional wages increased at the rate of 3.0 percent per year and male professional wages grew at the rate of 3.3 percent per year. Between 1960-69, teachers wages increased 3.2 percent per year in real terms, but fell back to 2.4 percent because of slow increases in 1969-70. Since the majority of teachers are employed full-time, the comparison between male professional wages and teacher wages is more appropriate than between total wages or all professional wages. [See Table 13]

These bare statistics seem to give the lie to the general impression that teacher wages have been rising faster than the average wage bill. The current impression is based on developments in teacher salaries between 1964 and 1969. In the first part of the decade, teacher wages increased in real terms at

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TABLE 13

COMPARISON OF GROWTH IN WAGES IN TEACHERS AND OTHER PROFESSIONALS
1960 - 1969

	Median Income			Median Income Constant Prices (1957-59 Dollars)			Average Annual Rate of Increase - Median Real Income		
	1960	1965	1969	1960	1965	1969	1960-65	1965-69	1960-69
All Wages	$3,999	$4,815	$6,142	$3,879	$4,381	$4,810	2.5	2.4	2.4
All Wages - Male	4,822	5,907	7,659	4,677	5,375	5,998	2.8	2.8	2.8
All Professional Wages	5,671	6,991	9,193	5,500	6,361	7,199	3.0	3.1	3.0
All Professional Wages - Male	6,692	8,313	11,062	6,491	7,564	8,662	3.1	3.4	3.3
All Teachers' Salaries 1/	5,275	6,485	8,635	5,116	5,909	6,762	2.9	3.6	3.2
Consumer Price Index - All Items (1957-59 = 100)	103.1	109.9	127.7						

1/ Mean salary

Sources: U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States, 1970 (91st Edition), pp. 234, 326 and 344; National Education Association, Research Division, Estimates of School Statistics 1970-71, Research Report 1970 R-15, p.16; U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-60 No. 75, "Income in 1969 of Families and Persons in the United States," pp. 110,112.

the rate of 2.9 percent. In the last half of the decade, they have been catching up by growing 3.6 percent in real terms per year, but stumbled again in 1969-70. The relationship of teacher salaries to male professional wages in 1960 was .79 percent, and at the end of the decade it was .78 percent.

For purposes of long range projections, it is probably more pertinent to tie the forecasts of teacher wages to those of all wages of male professionals. In that connection, a reminder about employment conditions of college graduates in the period 1960 to 1969 may not be out of place. It will be remembered that the unemployment rate during the 1960's averaged 4.3 percent; for male professionals and managers the average unemployment rate rarely exceeded one percent and averaged 1.4 percent during the decade. Under those circumstances, it is not surprising that male professional wages rose somewhat faster than average wages.

By the end of 1970, the unemployment rate averaged 6.5 percent and professional unemployment showed a startling increase to 2.5 percent.[19/] The situation is believed to continue into 1971 with the unemployment rate for all workers going down slightly and that of professionals will remain at its previous level or increase somewhat.

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In our discussion of demand and supply of persons with college degrees, we pointed out that the demand and supply was going to be roughly in balance. A slight excess of persons with college degrees is likely to manifest itself towards the end of the decade. Under these circumstances, we have good reason to believe that the unemployment rate among college graduates and the professional category of workers is likely to come closer to that of the total labor force, especially since the career patterns of young college-educated workers are likely to be quite different in the 1970's as compared to the 1980's. Some hiatus with respect to employment will depress starting wages in the 1980's. If other factors which affect the teacher market do not influence the wage levels, we can expect starting salaries of teachers to grow no more than 2.2 percent per year in real terms between 1970 and 1980.

An Examination of Pressures on Teacher Wages

Teacher Unionism - Our examination of wage developments indicates that unionism has not affected the level of wages of teachers. This finding agrees with a government survey that male professional earnings of unionized workers were 7.0 percent below the average of all male professional workers.[20]

A recent study commissioned by the American Federation of Teachers (AFT) came to the same conclusions with respect to the impact of teacher unionism on wages. Professor Kasper found little relationship between unionization and statewide salary increases of teachers.[21/]

This study examined data on teacher salaries in school systems with 12 thousand or more enrollment located within standard metropolitan areas for which wage data was reported by the National Education Association (NEA) for both the 1960-61 and the 1968-69 school years. Salary data for 169 school districts were then examined and districts which were either members of the AFT or affiliated with the NEA were compared with other districts where teachers were not represented by the Federation or the Association.

Two separate analyses were made. The first compares schools which had a local representative body and those which did not. The second analysis attempted to control for spillover effects of an agreement over an entire metropolitan area. Thus, it was hypothesized that if one school district within a SMSA was represented by a union or the Association, the demands made by that district would also benefit teachers in the neighboring districts.

The effect of membership in the AFT or the NEA was measured in four different ways: (1) the rate of increases

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in mean salary between 1960-68; (2) the rate of increases in starting salary between 1960-68; (3) the ratio of mean salary in school districts represented to mean salaries in school districts without a bargaining agent; and (4) the relationship of starting salaries in districts with the union or association present, to those without. The results of these analyses appear in Tables 14 and 15.

Despite the fact that in almost 90 percent of school districts with AFT locals the union represented teachers in salary negotiations, these school districts registered mean salary increases of 42 percent as contrasted to an average salary increase of 47 percent in districts without union locals. While starting salaries in AFT-represented districts increased 42 percent, those in non-AFT districts grew by 45 percent. In the Northeast (the area where most AFT locals are located) districts represented by the AFT gained 38 percent in wages as contrasted by 47 percent for other Northeast districts. Starting salaries in districts in the Northeast represented by the AFT, increased 49 percent, while those without locals increased 47 percent.

It is true that the AFT membership is concentrated mostly in large central city districts which are more hard-pressed financially. Hence, it is important to see whether spill-over of the tough bargaining of the AFT affected neighboring areas.

TABLE 14

PERCENT OF INCREASES IN STARTING AND MEAN TEACHERS SALARIES, 1960 TO 1968 IN THOSE SCHOOL DISTRICTS WITH OR WITHOUT AND AFFECTED OR NOT AFFECTED BY LOCAL REPRESENTATION OF THE AMERICAN FEDERATION OF TEACHERS AND THE NATIONAL EDUCATION ASSOCIATION

Region	% of Increase in Starting Salary 1960-1968		% of Increase in Mean Salary 1960-1968		% of Increase in Starting Salary 1960-1968		% of Increase in Mean Salary 1960-1968	
	With Representation	Without Representation	With Representation	Without Representation	Affected	Not-Aff.	Affected	Not-Aff.
				AFT				
Northeast	48.9%	46.8%	37.6%	46.8%	48.7%	46.5%	37.7%	47.7%
South	46.9	56.6	49.7	48.6	46.9	56.6	49.7	48.6
North Central	42.7	43.3	41.2	50.1	35.1	44.3	41.2	51.7
West	34.0	35.1	32.0	45.8	33.9	35.1	36.1	45.9
Total	41.7%	45.1%	42.0%	47.2%	38.5%	49.9%	41.2%	48.7%
				NEA				
Northeast	53.1%	42.9%	37.3%	45.2%	51.1%	43.8%	37.4%	44.7%
South	54.5	56.1	48.8	50.7	54.3	52.2	48.9	49.9
North Central	42.7	42.9	41.4	49.1	42.7	43.0	41.3	43.9
West	34.8	34.5	42.2	41.5	31.1	35.2	42.3	39.9
Total	45.5%	44.6%	42.7%	47.8%	43.9%	44.6%	44.9%	47.6%

Source: National Education Association, Research Division, Biennial Salary Survey of Public School Professional Personnel, 1960-61 and 1968-69 (21st and 24th Biennial Surveys), and Salary Schedules for Teachers, 1960-61 and 1968-69.

TABLE 15

RATIOS OF MEAN AND STARTING TEACHERS SALARIES IN THOSE SCHOOL DISTRICTS AFFECTED OR NOT AFFECTED BY AMERICAN FEDERATION OF TEACHERS AND NATIONAL EDUCATION ASSOCIATION LOCALS

	1960		1968	
Region	Ratio of Mean Salary Non-Affected to Aff.	Ratio of Starting Salary Non-Affected to Aff.	Ratio of Mean Salary Non-Affected to Aff.	Ratio of Starting Salary Non-Affected to Aff.
		AFT		
Northeast	1.22%	1.04%	1.14%	1.05%
South	1.19	1.15	1.20	1.08
North Central	1.13	1.04	1.05	.98
West	1.10	1.03	1.02	1.02
Total	1.27%	1.13%	1.20%	1.04%
		NEA		
Northeast	1.18%	1.02%	1.12%	1.07%
South	1.06	1.01	1.05	1.02
North Central	1.08	1.02	1.06	1.02
West	1.07	1.01	1.09	.98
Total	1.08%	1.02%	1.06%	1.01%

Source: Same as Table 13.

We were unable to find these spill-over effects. AFT and neighboring districts increased their salaries by 41.2 percent nationwide and 37.7 percent in the Northeast. In those areas where the AFT was not active, mean salaries increased by 49 percent throughout the nation and 48 percent in the Northeast.

A similar analysis was performed for districts where teachers are members of the NEA. Here we did expect the relationship between wage increases and NEA membership to be equally marginal because in only 26 percent of school districts does the NEA represent teachers in collective bargaining. Our anticipations were borne out. Over the eight year period 1960-68,school districts with NEA membership increased mean salaries by 43 percent, while those without registered salary growth of 48 percent. NEA membership had a more beneficial effect on starting salaries; the average increased 46 percent in NEA districts as contrasted to 45 percent in other districts.

While the AFT's membership is concentrated in the Northeast, the NEA is strongest in the South. A comparison of NEA-membership districts in this area to those without NEA membership, was unenlightening. Member districts gained 49 percent in mean salaries while non-member districts increased their average wages by 51 percent. Only in the Northeast, where NEA has 13 percent of its local associations, did the starting salaries increase faster than those of non-NEA districts. The growth there was 53 percent versus 43 percent.

If one compared neighboring districts and those represented by NEA to all other districts, changes in the patterns of wage increases can be found. NEA districts and their neighbors saw a salary increase of 45 percent, while those without nearby representation grew 48 percent.

A special analysis was performed on salary data on the 13 largest school districts represented by the AFT and NEA. [22] When it came to increases in average salaries, both AFT and NEA districts lagged behind the other districts. By contrast, starting salary grew somewhat faster in AFT-represented districts, 48 percent versus 45 percent. In the case of NEA, starting salary lagged 38 percent versus 45 percent.

This brief analysis of the changes in average salaries for school districts which do have and do not have NEA and AFT representation indicates that neither organization has gained significantly greater salary increases for their districts. Since our concern was with average salaries, the influence of organizational activity in securing other benefits such as better work schedules and retirement plans was not investigated. It was also not possible to determine whether teachers in the districts classified as non-NEA or AFT did in fact employ some collective bargaining techniques or procedures to secure salary increases.

Teacher organizations have grown mostly in large urban school districts where school boards are hardest pressed for funds. Possibly the increases which the teachers' groups did secure would have been substantially lower if the organizations were not active. At the very most, somewhat faster increases, say on the order of five percent, could be expected in starting salaries as labor organizations become more pervasive in representing teachers.

Projection of Teacher Salaries in Public School

Salaries for public school teachers for 1975 and 1980 were projected in the following manner: (1) average starting salaries were estimated, (2) the degree mix of teachers in 1975 and 1980 was taken into account, and (3) average number of salary increments was projected to 1975 and 1980, and appropriate adjustments for an increase in increments were made to the relationship between starting salaries and projected average salaries.

Starting Salaries Projection - In the course of the past 10 years, minimum schedules for B.A. salaries have increased at the rate of 2.2 percent per year. Minimum schedules for master degree recipients increased at the slightly faster rate of 2.3 percent.[23/] In order to derive an estimate for starting salaries for all teachers, it was thus necessary to derive an estimated mix of new teachers with bachelor and master's degrees in 1975 and 1980.

The degree mix is estimated on the basis of reports from 22 states, which have provided information on the degrees held

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by new teachers and the teachers already on board. The data for the 22 states indicates that 8.4 percent of new teachers and 24.7 percent of all teachers were holders of master's degrees. The proportions of teachers with M.A. or higher degrees in the sample are 23.9 percent below the national estimate of NEA for teachers in all districts. Hence, it seemed reasonable to inflate the proportion of entrants by that figure. It was estimated that 10.4 percent of all new teachers would hold at least master's degrees in 1970. [See Table 16] The composite wage rate of beginning teachers for 1970 was thus estimated at $6927 in 1970/71. An independent check from salary data of teachers under age 25 compiled, but not published by NEA, validated this figure.

Thus, the starting salaries for 1975 and 1980 were calculated by multiplying the share of beginning teachers with each type of degree, keeping the 1970 ratio constant, by projected Minimum Scheduled Salary for each degree level. The estimates of starting salaries of $7728 and $8621 were derived for 1975 and 1980. [See Table 17]

Adjustments for Change in Degree Mix - Roughly, a quarter of all persons with master's degrees or higher were in elementary or secondary teaching in 1970. This proportion was projected to 1975 and 1980. The total proportion of teachers with Master's degrees was thus estimated to increase from the 1970/71 level of 30.6 percent to 35.6 percent in 1975, and 42.4 percent in 1980. [See Table 18] These estimates agree fairly closely with USOE projections of graduate degrees in education for the decade

TABLE 16

PERCENT OF NEW AND EXPERIENCED TEACHERS WITH MASTERS DEGREE OR HIGHER, 1969 - 70

	All Teachers With M.A. or Higher Degree (Percent)	New Teachers With M.A. or Higher Degree (Percent)
22 States reported by NEA	24.7	8.4
Total U.S.-NEA Estimate	30.6	
Total U.S.-Estimate of this study		10.4

Source: National Education Association, Research Division, Teacher Supply and Demand in Public Schools, 1970, Research Report 1970 R-14, pp. 53-54.

TABLE 17

STARTING SALARIES OF CLASSROOM TEACHERS

	1970-71	1975 1/	1980 1/
B.A. Minimum Salary	$6,850	$7,637	$8,515
M.A. Minimum Salary	7,599	8,514	9,539
Average Starting Salary 2/	6,927	7,728	8,621

1/ In 1970 dollars.

2/ Assumes 10.4% of new teachers have M.A., and 89.6%. have B.A.

Sources: National Education Association, Salary Schedules for Teachers, 1970-71, Research Report 1970, R-12, p.6; minimum scheduled salaries projected by compounding annual growth in real terms 2.2% for bachelors and 2.3% for masters, based on 1960-70 experience.

TABLE 18

CURRENT AND PROJECTED NUMBER OF TEACHERS WITH MASTER'S OR HIGHER DEGREE AS PERCENT OF ALL PERSONS WITH MASTER'S OR HIGHER DEGREE

Year	Teachers	Teachers With M.A. or Higher (Percent)	Teachers With M.A. or Higher (Thousands)	Total in Population With M.A. or Higher (Thousands)	M.A. Holders Who Are Teachers (Percent)
1969-70	2,008	30.6	615	2,483	24.8
1975	2,611	35.6	930	3,751	24.8
1980	2,927	42.4	1,240	5,002	24.8

Sources: 1970: - Total teachers, National Education Association, Research Division, Estimates of School Statistics, 1970-71, Research Report 1970, R-15, p.13; Percent teachers with M.A. or higher in 1969-70, National Education Association, Teacher Supply and Demand in Public Schools, 1970, Research Report 1970, R-14, p.53;
1975, 1980: - Projections discussed in text, Tables 3 and 12.

of the 1970's.

Even after making generous assumptions about the spread between salaries of persons with a bachelor's and a master's degree and allowing it to increase by an additional two percent during the next ten years, the net effect of this change in degree mix will be trivial, a little over one percent of total salary during the next ten years. [See Table 19]

Adjustments for Changes in Experience Levels - By contrast to the rather minor adjustments to salaries due to the degree mix, the effect of higher experience levels on wages will be especially pronounced in the early 1970's, and will result in somewhat higher wages by the end of the decade.

If our projections of teacher demand above are realistic, patterns of entry and exit during the 1970's will be drastically different from those during the 1950's and 1960's. After examining the entry and exit rates of teachers, our best estimate is that there will be a considerable reduction in job opportunities for women re-entering the labor force after age 34. If this assumption is accepted as realistic, the average number of salary increments will increase especially fast in the early 1970's.

The increments received were estimated by computing the average salary paid to teachers in 1970 and dividing it by the estimated starting salary for that year. An examination of salary schedules estimated that 4.2 percent seemed to be a good average rate of increase per year paid for experience. The percentage by

TABLE 19

EFFECT OF CHANGE IN DEGREE MIX ON TEACHER'S SALARIES

	1970-71	1975	1980
Premium for M.A.	110.9%	111.5%	112.0%
Percent of Teachers with B.A.	69.4	64.4	57.6
Percent of Teachers with M.A. or Higher	30.6	35.6	42.4
Ratio (B.A. Salary = 100.0)	103.3	104.1	105.1
Index of all salaries	1.000	1.008	1.017

Sources: See Tables 17 and 18.

which average salaries exceeded starting salaries was divided by 4.2 percent to derive an average number of increments received in 1970. This was computed to be eight increments. The computation was checked by re-analyzing a survey conducted by the NEA for the 1969-70 school year. This survey provided salary ranges and median salary of teachers by age. It was possible to compute average experience for each age group and to estimate the number of increments at seven.

For 1975 and 1980, estimates of increments were made for all age groups on the assumption that little or no hiring of new teachers older than 35 would take place. By eliminating the estimated new hires from the NEA survey, it was possible to re-estimate the average increments for the older age groups. The estimates by age group appear in Table 20. It should be noted that once a teacher has been granted 12 increments, no further increments were computed because most salary schedules do not provide for additional increases beyond that length of service. This calculation produced estimates of an average 9.7 increments in 1975 and 8.8 in 1980. [See Table 21]

Estimates of Average Wages of Teachers, 1975 and 1980

The estimate of average wages of teachers was derived by multiplying average salaries in 1970 by (1) the increase in beginning salaries, (2) a small increment to reflect the higher proportion of teachers with master's degrees, and

TABLE 20

ACTUAL AND PROJECTED AVERAGE SALARY INCREMENTS FOR TEACHERS 1969-70, 1975 AND 1980

	1969-70	1975	1980
Less than 25	2.5	2.5	2.5
25 - 29	4.9	6.7	4.3
30 - 34	6.5	10.5	8.4
35 - 39	8.1	11.6	11.7
40 - 44	8.3	12.0	12.0
45 - 49	8.7	12.0	12.0
50 - 54	8.4	12.0	12.0
55 - 59	9.0	12.0	12.0
60 and over	9.0	12.0	12.0
All ages	7.0	9.7	8.8

Source: Computed from unpublished tabulations of National Education Association, of salary distribution by age, 1969-70, and age distribution of teachers, Table 12.

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TABLE 21

EFFECT OF CHANGE IN AVERAGE NUMBER OF INCREMENTS ON TEACHER'S SALARIES

Year	Average Number of Increments	Rise in Salary Due To Increase in Average Number of Increments
1970-71	8.0	-
1975	9.7	7.1%
1980	8.8	3.4%

Sources: 1970-71 average number of increments based on percent increase of average salary over starting salary divided by 4.2, the average annual increase for length of service, see Table 17 and National Education Association, Research Division, Estimates of School Statistics, 1970-71, Research Report 1970-R-15, p.16. Projected average number of increments based on hiring patterns in next decade, see text and Table 20.

(3) the increases due to higher number of increments. The adjustments are displayed in Table 22. The estimated average salaries, in 1970 prices, are $11,179 in 1975 and $12,148 in 1980.

Other Local School Personnel - Estimates of salaries of other local school personnel can be reasonably tied to teacher salaries. For the period 1962-63 to 1968-69, the only period for which a comparison between the wages is available,[24] there was remarkable stability in the relationships between most school categories and teacher salaries. [See Table 23]

School superintendent salaries rose faster than teacher salaries. This was to be expected since the average size of school districts grew. Consolidations, if not enrollment growth, will continue contributing to this trend, and past rates of growth were projected to continue. In the case of nurses, we have no insights why relative salaries declined, and they were trended accordingly. Salaries of social workers and visiting teachers have converged somewhat with those of teachers, and we projected this egalitarian trend to continue. The estimates of salaries appears in Table 24.

TABLE 22

AVERAGE SALARIES COMPUTED AS A FUNCTION OF STARTING SALARIES, INCREMENTS AND IMPROVEMENT IN TEACHER EDUCATION

$$\bar{S}_{y_i} = SS_{y_i}\ \left(\frac{\bar{S}}{SS\ 1970} \text{ X Increment index}_{y_i} \text{ X Education index}_{y_i}\right)$$

$$1975\ \bar{S} = 7{,}728\ (1.34 \text{ X } 1.071 \text{ X } 1.008) = \$11{,}179$$

$$1980\ \bar{S} = 8{,}621\ (1.34 \text{ X } 1.034 \text{ X } 1.017) = \$12{,}148$$

Source: See text and Tables 19 and 21.

TABLE 23

ACTUAL AND PROJECTED RATIOS OF AVERAGE SALARIES FOR LOCAL SCHOOL PERSONNEL

Personnel	Actual 1962-63	Actual 1964-65	Actual 1968-69	Projected 1975	Projected 1980
Classroom Teachers	1.00	1.00	1.00	1.00	1.00
School Counsellors	1.29	1.30	1.30	1.305	1.31
Directors of Guidance or Head Counsellors	1.30	1.31	1.34	1.36	1.38
School Librarians	1.10	1.08	1.08	1.08	1.08
Psychologists and Psychometrists	1.40	1.40	1.40	1.40	1.40
Social Workers and Visting Teachers	1.20	1.20	1.16	1.10	1.06
School Nurses	.98	.98	.93	.90	.90
Principals and Assistant Principals	1.46	1.48	1.56	1.66	1.74
Superintendents	1.77	1.88	1.93	2.12	2.26

Sources: Ratios estimated on basis of national estimates for all operating school systems 1962-63, 1964-65, and 1968-69 as reported in National Education Association, Research Division, Biennial Salary Survey of Public School Professional Personnel, for each of these years (21st, 22nd and 24th biennial surveys).

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Effect of Inflation on Wages - Up to now, all wages were projected in constant prices. It is unlikely that prices will not rise during the next decade. An array of wages, given possible rates of inflation from one to six percent a year is presented in Table 24.

TABLE 24

PROJECTED SALARIES OF LOCAL SCHOOL PERSONNEL a/

	1968 Salaries	1970 Dollars	1975 Salaries					
			Annual Rates of Inflation					
			1 %	2 %	3 %	4 %	5 %	6 %
Classroom Teacher's								
Starting	$ 6,004	$ 7,728	$ 8,122	$ 8,532	$ 8,959	$ 9,402	$ 9,863	$10,342
Average	7,952	11,179	11,749	12,343	12,959	13,601	14,268	14,960
School Counsellors	10,279	14,533	15,274	16,046	16,848	17,682	18,548	19,448
Directors of Guidance	10,471	15,203	15,979	16,785	17,624	18,497	19,403	20,345
School Librarian	8,400	12,073	12,689	13,330	13,996	14,689	15,409	16,156
Psychologists & Psychometrists	11,175	15,651	16,449	17,280	18,144	19,042	19,975	20,944
Social Workers & Visiting Teachers	9,145	12,297	12,924	13,577	14,256	14,961	15,694	16,456
School Nurses	7,292	10,061	10,574	11,108	11,663	12,241	12,841	13,464
Principals & Assistant Principals	12,220	18,557	19,504	20,488	21,513	22,577	23,684	24,833
Superintendents	15,131	23,699	24,908	26,166	27,474	28,833	30,247	31,714

TABLE 24 (Cont.)

PROJECTED SALARIES OF LOCAL SCHOOL PERSONNEL a/

	1970 Dollars	1980 Salaries Annual Rates of Inflation 1 %	2 %	3 %	4 %	5 %	6 %
Classroom Teacher's							
Starting	$ 8,621	$ 9,523	$10,509	$11,586	$12,761	$14,043	$15,439
Average	12,148	13,419	14,808	16,326	17,982	19,788	21,755
School Counsellors	15,914	17,579	19,399	21,387	23,557	25,922	28,499
Directors of Guidance	16,764	18,518	20,435	22,529	24,815	27,307	30,022
School Librarian	13,120	14,493	15,993	17,632	19,421	21,371	23,496
Psychologists & Psychometrists	17,007	18,786	20,731	22,856	25,174	27,703	30,457
Social Workers & Visiting Teachers	12,877	14,224	15,697	17,306	19,061	20,975	23,061
School Nurses	10,933	12,077	13,327	14,693	16,183	17,809	19,579
Principals & Assistant Principals	21,138	23,349	25,767	28,408	31,289	34,431	37,855
Superintendents	27,454	30,326	33,466	36,896	40,639	44,720	49,166

a/ Based on an average of 9.7 and 8.8 increments in salary for classroom teachers in 1975 and 1980 respectively.

Sources: 1968 Salaries, National Education Association, Research Division, Estimates of School Statistics, 1970-71, Research Report 1970 R-15, p. 16, and 24th Biennial Salary Survey of Public School Professional Personnel, 1968-69, Research Report 1969 R-7, pp. 11-23; 1975 and 1980 Salaries, see Tables 22 and 23.

THE SUPPLY AND DEMAND FOR TEACHERS
1970, 1975 AND 1980

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3/ U.S. Department of Commerce, Bureau of the Census, Current Population Reports, "Educational Attainment," March 1959, March 1964, March 1969, March 1970, Series P-20, Nos. 99, 138, 194, 207.

4/ U.S. Department of Health, Education, and Welfare, Office of Education, Projections of Educational Statistics to 1978-79, p. 41.

5/ National Education Association, Research Division, Teacher Supply and Demand in Public Schools, 1970, Research Report 1970-R14, p. 53.

6/ Evaluation and Research Program of the U.S. Census of Population and Housing, 1960: Accuracy of Data on Population Characteristics as Measured by Reinterviews, Series ER60, No. 4, table 12, as cited in U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-20, No. 207, "Educational Attainment: March 1970," p.4.

7/ Howard L. Vincent, "Supply and Demand of Elementary and Secondary School Teachers," Chapter 3 in Education in The Seventies, U.S. Department of Health, Education, and Welfare, Office of Education, May 1968.

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9/ Malcolm S. Cohen, Samuel A. Rea, Jr., and Robert J. Lerman, A Micro Model of Labor Supply, BLS Staff Paper 4, 1970, p.79.

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10/ U.S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings, Vol. 17, No. 8, February 1971, p. 45.

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12/ Female labor force participation rates for 1967 to 1969 are from U.S. Department of Labor, Bureau of Labor Statistics, Handbook of Labor Statistics 1970, Bulletin 1666, p. 29; for January 1970, U.S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings, Vol. 17, No. 8, February 1971, p. 32.

13/ Sophia C. Travis, "The U.S. Labor Force: Projections to 1985," Monthly Labor Review, May 1970, p. 4, reprinted as Special Labor Force Report 119 with supplementary tables.

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15/ Proportion of persons with four or more years of college for 1970: U.S. Department of Labor, Bureau of Labor Statistics, Educational Attainment of Workers, Special Labor Force Report 125, and unpublished tabulations: for 1960: U.S. Department of Commerce, Bureau of the Census, United States Summary, PC(2)7A, pp. 116,129

16/ Joseph N. Froomkin, "Ph.D's in Science and Engineering in the 1980's," a report submitted to the National Science Foundation pursuant to contract NSF-0632, unpublished.

17/ Results of analysis of CPS sample with U.S.O.E., Education in the Seventies, U.S. Department of Health, Education, and Welfare, Office of Education, Office of Program Planning and Evaluation, Planning Paper 1, 1968, p. 12.

18/ cf. "Educational Attainment," footnote 3; Howard L. Vincent, footnote 7; and a labor force participation rate of approximately 63 percent for college educated women under age 25, Table 6.

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23/ National Education Association, Research Division, Salary Schedules for Teachers, 1970-71, Research Report 1970-R12, pp. 6, 14

24/ National Education Association, Research Division, Biennial Salary Survey of Public School Professional Personnel for 1962-63, 1964-65, 1966-67 and 1968-69 (21st to 24th biennial surveys).

SECTION 4

PROJECTIONS OF CURRENT EXPENDITURES
1975-76 AND 1980-81

November 1971

PROJECTIONS OF CURRENT EXPENDITURES
1975-76 AND 1980-81

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PROJECTIONS OF CURRENT EXPENDITURES
1975-76 AND 1980-81

Introduction

The projections of expenditures for 1975-76 and 1980-81 reproduced below were derived by splicing a variety of sources. Considerable reliance has been placed on data collected by the Department of Health, Education, and Welfare, U.S. Office of Education, National Center for Educational Statistics, Elementary-Secondary General Information Survey (ELSEGIS), for 1967-68 and 1968-69,[1] as well as periodic reporting by state departments of education compiled and published by the same organization.

In addition, data developed by the U.S. Bureau of the Census in the 1962 and 1967 Census of Governments, the Current Population Survey, preliminary tabulations from the 1970 Census, etc., have been used to cross-check the data and help develop more consistent estimates. Data collected by the National Education Association was also extensively used in both checking the consistency of estimates and projecting trends.

The greatest challenge in making estimates for 1967-68 and projections for 1975-76 and 1980-81 was to make sure that the data garnered from disparate sources--even though labelled identically or in very similar terms--included or excluded the same items. In a number of instances, especially in the case of ELSEGIS, great care had to be taken that definitions in that survey corresponded to definitions used in state reports. Even more serious problems were encountered in attempting to splice Census data with data originating from NCES.

The report details the adjustments which were made, but it may be well to summarize here the reasons for some of the difficulties encountered by this study. We set out to estimate costs for major components of educational expenditure for four U.S. Census regions and three types of district within each Census region. The data we worked with were (1) a national sample of school districts in ELSEGIS, which was not picked to provide the breaks chosen, and (2) state data which did not distinguish expenditures between urban, suburban, and non-metropolitan districts. Time and again, while the totals for the national sample were extremely close to similar estimates of expenditures from state sources, the totals for a particular region were likely to differ. Even in the case of classifications of students by level of school attended, the information from ELSEGIS did not necessarily agree with that reported by states for a particular year.

The discrepancies in coverage between U.S.O.E. data and that collected by the U.S. Bureau of the Census were, of course, more pronounced. For instance, the Census of Governments did not report bonds issued by school housing authorities, a substantial portion of the indebtedness contracted in a number of regions. Also the count, and the projection, of students by type of residence based on Census statistics did not correspond to counts of students in urban school districts, as reported by U.S.O.E., or the estimates of this study. School districts, especially in the South and the West, do not necessarily enroll only central city residents. County-wide districts encompassing central cities, are common, e.g., the Dade County District includes the City of Miami and its suburbs. We decided it was essential to classify districts with substantial numbers of students in central cities as central city districts.

Hence, part of the school population in suburban metropolitan areas was added to that of central cities in order to adjust Census data to conform to educational boundaries.

Estimates of School Population by Type of District Within Region

Totals for enrollment by region for 1967-68 through 1969-70 were made to correspond with published statistics of enrollment by NCES. For 1968-69, the year for which ELSEGIS collected and published enrollment statistics, small adjustments had to be made for enrollment figures for grades one through 12 derived from the ELSEGIS information. These adjustments ranged from one per cent in the Northeast, to 4.3 per cent in the North Central area, and roughly 5 and 7 per cent in the South and the West, respectively (see Table 1).

Somewhat more drastic adjustments had to be made to kindergarten and nursery enrollments. A number of jurisdictions administer these programs outside of the administrative purview of regular public school districts, and the U.S. Bureau of the Census estimates exceed both ELSEGIS and state counts of younger children in publicly-supported programs by close to half a million each year in the course of the past five years. These enrollments were allocated on the basis of Census reports of enrollment in public kindergartens and nursery schools. The adjustments are detailed in Table 2, which shows both ELSEGIS estimates and those adopted in this study.

Estimates of the proportion of students in ELSEGIS by type of school district within region were used to allocate regional totals reported by states. These were compared with estimates derived from the U.S. Bureau of the Census counts of population by type of residence. In both the South and the West regions a substantial proportion of suburban residents attended school districts headquartered in urban centers. It was estimated that 27.7 per cent of the southern and 13.2 per cent of the western suburban residents attended central city school districts. These adjustments were made to the projections of attendance in 1975-76 and 1980-81.

An additional adjustment was made to the proportion of total enrollment in elementary and secondary schools as reported in ELSEGIS. The region-by-region enrollments in grades one through 12 were compared to those reported by the states. As a general rule small adjustments--less than 10 per cent of the enrollment in elementary and secondary schools--had to be moved from one category to another to make the estimates conform with published state totals. The adjustments are detailed in Table 3.

By comparing enrollment by grade, from U.S. Bureau of the Census data and that reported by states for fall 1970, it was possible to allocate the proportion of seventh and eighth graders to high school. These proportions are displayed in Table 4, and were used together with the other adjustments to estimate enrollments by level of school for 1975-76 and 1980-81. Projections of enrollments for those two years, as well as estimates of enrollments for 1967-68 and 1968-69 appear in Table 5.

Estimates of Teachers

The estimates of the number of teachers (and, hence, student-teacher ratios for 1968-69 and the following years) was an extremely complex and vexing task because estimates of the number of teachers had to be reconciled from a variety of sources. The number of teachers by state and, hence, by region, is reported by the National Education Association and by all state education agencies (SEA's).[2] It can also be estimated by region and type of school district from ELSEGIS.

The NEA reports present budgeted positions, for regular schools and special pre-elementary grades. The definition of positions reported by SEA's has not been stated clearly and may include positions in special as well as regular day schools. ELSEGIS reports full-time equivalent personnel employed by regular schools. Of the three sources, ELSEGIS appears to be the most satisfactory, and an examination of the data reported in the 1968-69 survey satisfied the staff of this study that it was fairly accurate. A comparison of estimates for 1968-69 derived from ELSEGIS by this study and those reported by the NEA and the states appears in Table 6.

Student-teacher ratios are available in ELSEGIS for nursery and kindergarten, elementary grades and high school classes. The nursery-kindergarten ratios were used by this study as a basis for projections without any changes. Those for elementary and secondary students were adopted for the total enrollment, but were modified slightly for both the elementary and secondary school levels. The adjustments were due to the reallocation of students between those two levels of instruction to make the estimates of this study conform to the enrollments reported by the states. Teachers were added or subtracted from the appropriate level of instruction in proportion to the number of students which were allocated to the level. The new pupil-teacher ratios so calculated appear in Table 7.

Projecting pupil-teacher ratios for the next 10 years is indeed an uncertain task. During the early 1960's pupil-teacher ratios remained extremely stable. They started declining again during the mid-1960's, and their decline was ascribed to the effect of the Elementary and Secondary Education Act which contributed $4 billion to the resources of the local education authorities. The projections of the Office of Education, prepared in 1969, and published in 1970, anticipated a slight decline in teacher-pupil ratios--so slight that by 1970 the reported pupil-teacher ratios were already below the projected levels for 1970.[3]

In the course of the past two years, the easing of the supply of teachers has made it possible to reduce pupil-teacher ratios somewhat faster than was believed likely on the basis of past trends. The declines have been quite pronounced, especially in the South, where a considerable number of vacancies used to remain unfilled.

Pupil-teacher ratios are a function of both the affluence and organization of local educational agencies. Rich districts have fewer pupils per teacher, and so do poorer but smaller districts. Small year-to-year fluctuations in pupil-teacher ratios in a given region or type of residence are ascribed to unfilled requirements and fiscal ability.

Hence, it was decided (1) to project a least-squares trend of pupil-teacher ratios for the total U.S. on the presumption that continued easing of teacher supply will encourage districts to continue hiring teachers, an assumption borne out by a recent survey of hiring intentions by superintendents and principals;[4] (2) to constrain the pupil-teacher ratios in elementary school at 122 per cent of the ratio in high school, the lowest relative size recorded in 10 years; and (3) to project pupil-teacher ratios for each region in proportion to the relation of the pupil-teacher ratio in that region to the pupil-teacher ratio for the total U.S. as of 1970-71. Separate ratios were projected for elementary and secondary schools. The history of pupil-teacher ratios from 1960-61 to 1970-71 appears in Table 8.

The expected rate of change for elementary and secondary school ratios in each region was applied to the calculated ELSEGIS ratio for each type of district within the region. The rate of change in elementary pupil-teacher ratios was applied to both nursery, kindergarten and elementary school students. The number of teachers by grade level is shown in Table 8A.

Teachers in Non-Regular Schools

The U.S. Office of Education, and ELSEGIS, reported employment and expenditures in regular day schools. In addition to these schools, approximately 500 thousand nursery and kindergarten students attend publicly-supported institutions according to U.S. Bureau of Census estimates. Pupils in these publicly-supported institutions were included in projections below. The appropriate pupil-teacher ratios for nursery and kindergarten were applied to the estimated number of pupils in all public nursery and kindergarten grades.

A much smaller number of students attend special schools. Some of these special schools are financed by state agencies and others by local districts. Some educational agencies provide instruction for exceptional children outside of the regularly established schools. Others are schools for potential high school dropouts, and in some cases include special secondary programs combining work and study, or, on occasion, practicums. Pupil-teacher ratios for these schools were calculated on the basis of 7 students per instructor for exceptional children and

13 students per instructor for secondary-level institutions. These ratios were derived from data in an unpublished School Staffing Survey conducted by the U.S.O.E. National Center for Educational Statistics in the spring of 1970.

Other Professional Employees

Supervisory and non-supervisory professional employees for 1968-69 were estimated on the basis of ELSEGIS counts. These estimates of full-time equivalent personnel appeared to be preferable to those collected by the NEA,[5] merely because when the average salaries reported by the NEA were multiplied by the number of teachers and other professionals, these costs exceeded reported expenditures. It is quite possible that NEA's estimates are too high because (1) they reported budgeted rather than filled positions, and (2)they did not distinguish between full-time and part-time employees.

The history of supervisory and non-supervisory professional personnel by region is reproduced in Table 9, and Table 10 gives a more detailed breakdown by type of district for the 1968-69 school year, based on ELSEGIS.

No source other than the NEA was found to project the ratio of supervisory and professional personnel into the future. The historic development of the numbers of supervisory and professional personnel relative to the number of teachers appears in Table 11. A logistic curve was fitted to the ratio of supervisory and non-supervisory to estimate their relationship to the number of teachers. The projected ratio of increase and the ratios for 1975-76 and 1980-81 are shown in Tables 12 and 13.

The choice of a logistic rather than a linear extrapolation was dictated by the record of past developments in the ratio of supervisory and non-supervisory personnel to teachers. Rather than increasing linearly, the past relationship is more in the nature of a step function: it remains constant for a number of years, and then changes. Undoubtedly, the changes in the mid-1960's were caused by the infusion of federal funds to provide special services to handicapped and disadvantaged students. Despite a leveling off of these moneys, the ratios of non-supervisory personnel did start increasing again towards the end of the decade. The estimated function understates the numbers of supervisory and non-teaching professionals compared to a least-square fit of past trends.

Non-Professional Employees

Non-professional employees, secretaries, clerks and teacher-aides were reported in the 1968-69 survey of ELSEGIS. Although school districts were asked to report full-time equivalents of non-professional personnel, it appears that they did not do so. The average salaries for these occupations are far too low, ranging from $1,100 to $3,400 when the number of employees is divided into aggregate non-professional salaries and wages reported by ELSEGIS.

The National Education Association, by contrast, estimates that 1968-69 secretarial and clerical salaries for the U.S. ranged between $3,600 and $5,200 per year. Teacher-aide salaries are also in this range. This is also a low, but more reasonable figure, especially if one realizes that roughly half of the non-professionals are teacher-aides. ELSEGIS data leads to an estimate of 212 thousand while the NEA salary estimates reduce these to about 164 thousand (see Tables 10 and 14). It was not possible to differentiate between clerical and teacher-aide employment.

Hence, the full-time equivalent number of non-professional employees was calculated by dividing the average expenditures for 1967-68 and 1968-69 ELSEGIS non-professional salaries by the average salaries. The ratio of students to non-professionals was derived by dividing the number of students reported by ELSEGIS by the estimated number of non-professionals. This ratio was kept constant for 1975-76 and 1980-81, since there is no information on trends.

Total Number of Instructional Personnel

The total number of instructional personnel was estimated for 1967-68 and 1968-69, and projected for 1975-76 and 1980-81. Actually, two sets of figures were estimated for 1967-68, one corresponding to the enrollment covered by ELSEGIS, which excludes certain independent school districts catering to nursery and kindergarten populations, and another including this figure. (The first set of estimates was used to derive adjustment factors for the estimated salary expenditures described below).

Table 15 shows the estimated number of teachers for 1967-68, 1975-76 and 1980-81, as well as the number of supervisory, non-supervisory and non-professional personnel. Our estimates indicate that the number of teachers is likely to increase by 468 thousand between 1967-68 and 1975-76, and by 99 thousand between 1975-76 and 1980-81. The total number of professional employees is projected to grow by 550 thousand in the seven years ending 1975-76, and by 132 thousand between 1975-76 and 1980-81. The number of non-professionals is projected to reach 177 thousand by 1975-76, an increase of 7.8 per cent over 1967-68, and will not increase substantially in the following five years.

These are basically inertia projections of past trends. It is possible to conceive of an increase in the proportion of non-professionals to relieve teachers of routine tasks. This trend, which manifested itself during the 1960's, is less likely to gain strength in the 1970's because the supply of persons with teaching credentials is likely to exceed the demand. Professional associations instead of encouraging this trend are likely to oppose the fracturing of teacher tasks.

The introduction of differentiated staffing may be slowed down or set back by resistance of such groups. But, as instruction is more individualized, pupil-teacher ratios are probably likely to go down in line with the projections above, unless para-professionals are introduced to replace professionals. Another movement, that of "teaching for mastery,"[6] puts greater reliance on remedial specialists. Our projections take this trend into consideration by providing a sizeable increase in the employment of non-supervisory professionals.

Estimates of Salaries for 1967-68, 1968-69, and Projections for 1975-76 and 1980-81

After examining available data, it was decided that the information collected by the NEA on average salaries of non-professionals, teachers, supervisory and non-supervisory personnel was the only source which differentiated earnings by type of personnel by region and type of district (see Table 16).

The information published by the NEA is available state-by-state and can be aggregated by region. The allocation by type of school district was performed by resorting the returns from the sample of school districts included in the NEA 24th Biennial Salary Survey. New sets of average salaries were derived.

These were rescaled in line with the 1968-69 employment by ELSEGIS and adjusted to agree with the NEA regional averages (see Table 17). The 1967-68 teachers' salaries by type of residence were estimated by reducing the 1968-69 salaries in line with the regional changes between 1967-68 and 1968-69 as reported by NEA.

The projections for 1975-76 and 1980-81 were made according to the methodology outlined in the "Supply and Demand of Teachers, 1970, 1975 and 1980." In accordance with the findingsof that report, teachers' salaries were projected to increase by 2.2 per cent a year in real terms, and further small adjustments were made to allow for a higher proportion of teachers with master's degrees, and an increase in seniority. Findings in that report were used to project supervisory salaries. Non-supervisory personnel salaries were allowed to increase at the rate of 2.3 per cent a year, also consonant to findings in that report. The ratio of non-professional wages to teachers' wages for 1967-68 was kept constant for 1975-76 and 1980-81.

Future wages of teachers, and supervisory and non-supervisory personnel were further projected separately for each region. The rate of growth of salaries for instructional personnel for the next ten years was adjusted by the ratio of growth of per capita income in a given region to growth of per capita income in the United States. These ratios appear in Table 18, and the projected average salaries are listed in Table 19.

Estimates of Total.Personnel Salary Costs

The estimates of total personnel salary costs are reproduced in Table 20.

The estimated increase was 60 per cent for teachers between 1967-68 and 1975-76, and 13 per cent between 1975-76 and 1980-81. For all professionals the increase was estimated at 63 per cent and 15 per cent respectively for these same two time periods. Total instructional outlays were estimated to increase by 62 per cent between 1967-68 and 1975-76 and by 15 per cent between 1975-76 and 1980-81.

Estimates of Total Personnel Expenditures for School Districts

A comparison of personnel outlays reported by ELSEGIS, with the results of cross-multiplication of positions reported by their respective mean wages, indicated that in three cases out of four--and especially in larger school districts--the estimated aggregate salaries for professional employees was below that reported by the individual school districts.

There were a number of reasons for this discrepancy. In the first place, about 4 per cent of a large school district's professional salary costs are for substitute teachers. Also, salary schedules reported by the NEA are base salaries and do not include certain special payments to teachers for extra work.

As a general rule, the discrepancies were largest in urban districts, as contrasted to rural districts, and higher in the Northeast as compared to the South.

An adjustment on an aggregative basis was made by type of district within region, and special adjustment factors were developed to reconcile recorded expenditures with those which were estimated. The factors were developed as follows:

(1) Outlays for each type of school district were estimated from the 1967-68 and 1968-69 financial ELSEGIS reports. The outlays for 1968-69 were deflated to 1967-68 prices and added to the 1967-68 professional salaries. The professional instructional salary expenditures for 1967-68 were then recalculated in proportion to the share of the combined two-year enrollment which belongs to the 1967-68 school year. The use of two ELSEGIS surveys reduced the sampling error, since the survey was not designed to produce reliable results by both region and type of residence.

(2) The number of teachers was derived from the 1967-68 pupil-teacher ratios discussed above.

(3) The 1967-68 employment of instructional personnel other than classroom teachers was estimated by assuming that the relationship of this outlay between 1967-68 and 1968-69 to teacher salaries was the same, and that supervisory and non-supervisory wages were increased by the same percentage between 1967-68 and 1968-69 as classroom teacher wages.

(4) Salaries for 1967-68 were also adjusted in accordance with the average changes in salaries region-by-region as reported by the NEA.

(5) The personnel and the salaries were cross-multiplied to arrive at an estimate of total professional salary costs.

(6) These estimates were compared with the figures derived from ELSEGIS.

In most cases the estimated professional outlays were higher than those derived by multiplying the number of teachers and other personnel by their estimated salaries. The range of underestimates extended from 16 per cent for central cities in the Northeast to no difference in rural areas in the South and suburban districts in the Midwest. Only in Midwestern and Western non-SMSA school districts was the estimated salary somewhat higher than that in ELSEGIS. The differences were one and 3 per cent respectively, and could be accounted for by the sampling error of the estimated salary, because the number of small school districts in the NEA sample is quite low.

The adjustment factors are shown in Table 21, which also shows selected steps of the calculation for 1967-68, 1975-76 and 1980-81.

Other Current Expenditures

Estimates of other current expenditures were reconciled to the totals by region reported by the U.S.O.E. The following procedure was used to allocate the expenditures by type of school district within region:

(1) The expenditures by type of school district reported in 1967-68 and 1968-69 were consolidated by deflating the 1968-69 ELSEGIS expenditures to 1967-68 prices by the appropriate index, and adding them to the expenditures in 1967-68.

(2) Per student expenditures, based on the number of students reported in ELSEGIS, were then calculated.

(3) Total expenditures were recalculated by using the 1967-68 pupil populations estimated by this study.

(4) The proportion of expenditures for each type of school

district within region was derived from these adjusted ELSEGIS figures.

(5) This proportion was applied to the reported expenditures by regions from state sources.

The consolidation of reported expenditures by school district from both ELSEGIS surveys doubled the sample size in each type of residence category. Moreover, regional totals of expenditure derived by this exercise corresponded much more closely to those reported by states and published by U.S.O.E. than those derived from either ELSEGIS survey by itself.

The projection of per pupil expenditure was based upon past trends of these expenditures in constant prices. From published indices an appropriate index was calculated for each component of expenditure, personnel, material costs, etc. A composite index for each expenditure was derived by weighing the index of each component by its percentage share of the total costs.

The index derived in this manner was compared to the Consumer Price Index (CPI). In some cases the costs rose faster than the CPI, in others slower. The difference in the rate of change in the index compared to the CPI was used to adjust the per pupil expenditures in 1975-76 and 1980-81. If the appropriate index increased faster than the CPI, the per pupil expenditures were increased. If it rose slower, they were lowered. The resulting estimates are labelled in the tables below as "adjusted 1967-68 dollars." In other words, the projections below are in 1967-68 dollars, adjusted by the relative cost change of the type of expenditure in constant prices.

The projections of expenditure items such as administrative expenditures, were made on other than a per-pupil basis. For instance, administration was found to be more closely related to instructional outlays, rather than the number of pupils, and it was projected accordingly, and pension costs were related to the total salaries and wages of local educational agencies.

A detailed discussion of each class of expenditure follows.

Administration

Total outlays for administration of local school districts trebled in the Northeast region between 1959-60 and 1967-68. During the same period, these expenditures increased two-and-a-half times in the North Central and South regions and doubled in the West. Total outlays for administration were $914 million in 1967-68 (see Table 22).

With much misgiving, the 1967-68 ratio has been projected for future years. In actual fact, the difference between 1959-60 is no more than 1.4 per cent of instructional outlays. There is no clear trend in the past, and the errors from that source cannot be large.

The cost of administration has closely paralleled the cost of total instructional expenditures. For the U.S. as a whole, between 1959-60 and 1965-66, the relationship of administration to total instructional expenditure varied between 4.57 and 4.66 per cent. In 1966-67, administration outlays equalled 4.97 per cent of expenditures, as three out of four regions showed a higher rate of outlays for that purpose as compared to costs in the previous year (see Table 22).

The allocation of administrative expenditures by type of school district within region was performed in accordance with the method outlined at the beginning of this section. The estimated percentages of administration are shown in Table 23. It will be noted that within a given region, administration costs are more burdensome the smaller the size of school districts. Administration took a larger percentage of instructional outlays in suburbs compared to central cities, and more in non-metropolitan areas than in the suburbs. Among regions, the Northeast has the highest relative administration costs, and the South the lowest.

By 1975-76, administration is projected to cost $1.5 billion, and will grow to $1.7 billion in 1980-81. These figures, by region and type of residence, are shown in the last table of this section, which summarizes total current expenditures (see Table 41).

Other Instructional Expenditures

The procedure outlined at the beginning of this section was used to estimate the allocation of this type of expenditure by type of district. The published estimates of other instructional expenditures were allocated by type of district within region.

The ratio of these estimates for 1967-68 to instructional salaries was calculated. This ratio was projected to 1975-76 and 1980-81. The assumption underlying this projection is that the technology of instruction will remain unchanged during the next ten years (see Table 24).

Operations and Maintenance

In the course of the 19 years, 1949-50 to 1967-68, the last year for which state reports for these expenditures have been published, outlays for the operation of plant increased five-fold. On a per student basis, the increase has been more than two-and-a-half times. In constant dollars, the increase was less spectacular, roughly three times in aggregate terms and some 60 per cent on a per student basis. The history of operations outlays is shown in Table 25.

The costs have been deflated by the appropriate indexes for each component of expenditure outlays. First, the expenditures were broken down by major account, salaries, fuel, light, water, etc., as well as supplies and other expenses. Then, appropriate indexes were applied to each component to deflate these outlays to 1967-68 constant dollars. The components are outlined in Tables 26 and 27, and the deflators are mentioned in the source to that table, which reproduces the index numbers.

A comparison of the behavior of the index appropriate to operations and the Consumer Price Index indicated that operations costs were likely to increase 0.6 per cent faster than the cost of living. In other words, the increase in costs of personnel and materials for school building operations was likely to be somewhat faster than that of the rest of the U.S. economy (see Table 28).

In addition, the costs per student in constant dollars were trended. These increased 2.8 per cent a year. The costs per student were cross-checked against commercial costs of operation (see Tables 29 and 30). Although the component costs were similar, their behavior was not. After analyzing commercial cleaning costs, it seemed likely that the increase in costs per student or square foot was likely to be caused by changes in crowding of schools, therefore it was decided to increase the costs per year by 2.2 rather than 2.8 per cent. This figure was derived by comparing the mix of elementary and secondary students in 1967-68, 1975-76 and 1980-81. It assumes that overcrowding will decrease by roughly one and one-half per cent a year.

The cost of building maintenance grew somewhat slower than the cost of operations, increasing less than four-fold in the course of the 19 years ending in 1967-68. In constant dollars, calculated along the same lines as the operations costs, the per student costs were constant during most of these 19 years, and increased on a per pupil basis only in the course of the last year, which made the increase for the total period equal to 0.7 per cent per year. In the future, it was decided to increase maintenance outlays by 0.4 per cent a year per student and to further increase 1.2 per cent in line with the increase in the relative factor costs compared to consumer prices.

Regional variations in costs were quite pronounced. Hence, an index to adjust these costs by region was derived separately and differential rates of increase computed as shown in Table 31.

The cost per student by type of district within region in 1967-68 was derived by the procedure outlined at the beginning of this section. These costs were projected at the rates shown in Table 31, and multiplied by the appropriate numbers of students for 1975-76 and 1980-81.

Operations were thus projected to increase from $2.1 billion in 1967-68 to $2.8 billion in 1975-76, and $3.3 billion in 1980-81. Maintenance costs were estimated to grow from $0.8 billion in 1967-68 to roughly $1.0 billion in 1975-76 and 1980-81 (see Table 32).

Attendance and Health

Attendance and health services are both small and relatively fast-growing components of local educational agency outlays. In 1967-68 they cost $78 and $198 million respectively. Two observations are appropriate about these expenditures: (1) the major component of cost is personnel salaries (see Table 27); and (2) once they are deflated by the increase in teachers' salaries over the relevant period, their cost per pupil is relatively constant (see Table 25).

The allocation of costs by type of district was performed according to the methodology outlined at the beginning of this section. The future cost in adjusted 1967-68 dollars is keyed to increases in teacher salaries, the index used to project wages for all non-supervisory professional personnel.

It is estimated that outlays on health will increase to $267 million in 1975-76 and $290 million in 1980-81. These costs may go even higher if regional differences are narrowed and the level of services in the Northeast becomes adopted in the rest of the country. Attendance costs are projected to increase to $105 and $113 million respectively by 1975-76 and 1980-81 (see Table 32).

Transportation

Two salient facts emerge from an analysis of the past trend in transportation expenditures: (1) the amount of money spent on transportation has increased sharply during the past decade, both in current and constant prices; and (2) the cost per student transported increased in constant prices as well. In summary, in 1961-62 28.2 per cent of all public school children were bussed.

In 1967-68 the percentage of public school children to whom transportation was provided had increased to 42.1 per cent. During the same time period costs per student transported increased from $46 to $54 dollars.(Tables 33 and 34)

In order to project the cost of transportation it was essential (1) to estimate the number of students transported in 1975-76; and (2) make an estimate of costs per student transported. The estimate of students transported by type of district within region was derived by assuming that districts where fewer than 50 per cent of the students are transported currently will increase the share of students transported by 2.3 per cent a year. The rationale for this estimate is described below. The cost per student transported was kept constant by type of district within region, also based upon observations of cost developments district by district.

The total expenditures by type of district within region were estimated according to the methodology described at the beginning of this section. The number of pupils transported by type of district within region was estimated on the basis of information gleaned from state reports which published costs per student by type of district. As a general rule, costs per student for central city school districts were estimated on the basis of available information and telephone interviews. The cost per student transported in other metropolitan locations appeared to be represented quite closely by the average expenditure in the region. The number of students transported was derived by dividing the average cost into the outlays. The residual number of students, after subtracting our estimates from the reported number of students by region, was allocated to non-metropolitan areas and the cost per student transported was calculated.

The estimates for 1975-76 and 1980-81 were derived by (1) trending the percentage of pupils transported; (2) multiplying by the estimated enrollment; and (3) further multiplying the results by the cost per student transported. Transportation outlays were estimated at $1.2 billion in 1975-76 and $1.3 billion in 1980-81, as compared to $1.0 billion in 1967-68 (see Table 37).

The rationale for these decisions is described below.

Number of Students Transported

Some stabs at the volume of transportation of students during the next 10 years have been made by the National Education Finance project.[7] One was based on the assumption that the trend in expenditures in the past 10 years continues for the next 10; the second that the amount spent per pupil stabilizes at the level of the end of the decade, and that the number of pupils transported grows only in proportion to enrollments.

While the first estimate anticipated an increase from 17.3 million students transported in 1967-68 to 29.6 million in 1980-81, the second anticipated no increase in the number of pupils. In all probability, the actual number of students transported will grow, but nowhere as fast as indicated by the first projection which reflects both the trend of growing enrollments and increased propensity to use school buses. The lower figure of 17.3 million, adopted as the second estimate, ignores this second trend.

An alternative way of projecting the number of pupils transported is to estimate the relative share of students who are likely to be transported in each region and type of district. An estimate for each region has been derived below using the individual experiences of states between 1960-61 and 1967-68. A composite curve was built up using each state experience as an observation. This proved to be intuitively attractive. States with litt bus transportation showed higher rates of growth than those which started the period with a relatively large proportion of students transported. The relative rate of growth for states where the share of pupils transported was less than 50 per cent, was 2.3 per cent a year between 1961-62 and 1967-68, and for those over 50 per cent, the growth rate was 0.7 per cent a year. These rates of growth were applied to each type of district by region. The ratio of students transported to total students was then estimated for 1975-76 and 1980-81.

Costs per Student Transported

While the cost per student transported in constant prices crept up slowly in three out of four regions, it increased quite considerably in the Northeast region (see Table 34). The difference in the behavior of the costs led us to examine the components of the costs and their behavior. The cost components and indexes are displayed in Tables 35 and 36.

The different behavior of costs in the four regions led us to examine differences in costs per pupil transported by type of district. For instance, the Northeast region, which experienced the largest increase in cost per student transported, had the highest proportion of expenditures in urban areas. Also, the costs of transporting students in the central cities was higher than the average for the region.

We estimated, based on telephone interviews, that the cost per student transported in Northeast central cities in roughly 60 per cent higher than the average for the region. This is quite out of line with experience in central cities in other regions. From scattered information of state departments of education, it appears that in the South and West expenses per pupil transported are generally lower in central city school districts compared to other districts, while in the Midwest they are about 20 per cent higher.

The reason for the unusual behavior of costs in the Northeast is that roughly 60 per cent of total transportation outlay is accounted for by New York City which has started a large busing program in the past five years. There, the cost per pupil transported by bus is some four or five times the regional average. A third of the cost differential is accounted for by higher cost per bus-day, and the rest by the inefficient utilization of buses. Apparently schedules in schools there are not sufficiently staggered to provide for more efficient bus utilization. The growth in busing in New York has been responsible for the increase in average cost per pupil transported.

These developments, as well as examination of trends in outlays for other states prompted us to reach the conclusion that costs per pupil transported for a whole region had more to do with the change in the proportion of students transported within a region rather than true changes in costs. Hence it was decided to keep costs per student transported constant over the period 1967-68 to 1980-81.

Total Cost Estimates

The methodology outlined above was used to project total costs for transporting public school students. It is estimated that these costs will grow from $981 million in 1967-68 to $1,243 million in 1975-76 and $1,321 million in 1980-81 (see Table 37).

Retirement Funds

The cost of school district contributions to retirement funds by type of school district and region was calculated in three steps: (1) fixed charges paid by local education authorities were allocated by type of district within region in accordance with the method outlined at the beginning of the chapter; (2) that portion of fixed charges which were paid to retirement funds in each region was applied to the total expenditures for fixed charges in each type of residence in the region; and (3) the estimated amount spent on pensions was then compared to total salary and wage costs of the local education agencies.

The share of salary and wage costs of each type of current expenditure is shown in Table 38. The estimated retirement payments as a per cent of wages are shown in Table 39. The estimates appear to be intuitively reasonable. Retirement costs are the highest percentage in central cities and lowest in non-metropolitan areas.

For 1975-76 and 1980-81, retirement costs are estimated to increase in line with wages paid by local education agencies. They were projected to increase to $1.6 billion by 1975-76 and $1.8 billion by 1980-81 from $1.0 billion in 1967-68 (see Table 41).

Other Fixed Charges and Miscellaneous Costs

Other fixed charges and miscellaneous costs were not examined with any degree of detail. The allocation of reported expenditures was calculated by type of district within region by the calculations outlined at the beginning of this section. The totals as derived were then calculated as a percentage of other current expenditures, less retirement costs.

It was assumed that this relationship would hold for 1975-76 and 1980-81 (see Table 40).

Total Current Expenditures

The last table in this section (Table 41) summarizes total current expenditures. By adding all components, including instructional outlays, discussed in the previous section, these outlays are projected to increase from \$26.4 billion in 1967-68 to \$41.4 billion in 1975-76 and \$47.6 billion in 1980-81. About three-fourths of the increase in expenditure is accounted for by instructional outlays, the remainder is accounted for by other outlays. Projections indicate that while instructional expenditures are likely to increase 88 per cent between 1967-68 and 1980-81, other outlays are likely to grow slower, by 63 per cent.

On a per student basis, total costs in 1967-68 are likely to increase by 45 per cent by 1975-76 and 67 per cent by 1980-81, net of the effect of a general price rise. Instructional costs per student are projected to grow 5.2 per cent a year between 1967-68 and 1975-76, and 4.3 per cent between 1967-68 and 1980-81. The per pupil cost of other current expenditures will grow 33 and 51 per cent respectively, for these same two periods.

FOOTNOTES

1 Results of the first ELSEGIS survey conducted in spring 1969 have been published under the titles Statistics of Local Public School Systems, Schools, Pupils and Staff, Fall 1968 (OE-20112-68) and Statistics of Local Public School Systems, Finances 1967-68 (OE-22027-68). The data and unpublished tabulations of school finances collected during the second survey in spring 1970 were also used. All data from both surveys were reanalyzed on the basis of the four regional and three metropolitan district classifications employed by this study.

2 National Education Association Research Division Estimates of School Statistics, Annual Report, The Association, Washington, D. C.; and U.S. Department of Health, Education, and Welfare, Office of Education, Statistics of Public Schools, Annual Report (Fall), U.S. Government Printing Office, Washington, D. C.

3 Cf. U.S. Department of Health, Education, and Welfare, Office of Education, Projections of School Statistics, to 1978-79, U.S. Government Printing Office, Washington, D. C., 1970, p. 57; and Statistics of Public Schools, Fall 1970, U.S. Government Printing Office, Washington, D. C., 1971, pp. 14 and 16.

4 A.J. Jaffe and Walter Adams, Employment Prospects in the Educational System for Unemployed Engineers, Scientists, and Other Highly Qualified Technical Personnel. Final Report for Summer 1971, Bureau of Applied Social Research, Columbia University, New York, 1971.

5 NEA, op. cit., 1969-70 edition, p. 30.

6 John B. Carroll, "A Model of School Learning," Teachers College Record, Vol. 64, No. 8, May 1963, pp. 723 ff.

7 Roe L. Johns, Kern Alexander, and K. Forbis Jordan, eds., Planning to Finance Education, National Education Finance Project, Gainesville, Florida, 1971, Vol. 3, pp. 329-360.

TABLE I

RATIOS OF ENROLLMENTS IN ELSEGIS TO STATE REPORTS FOR GRADES 1-12, BY REGION, 1968-69
(in thousands)

	ELSEGIS	States	Ratio
NORTHEAST	8,703	8,794	.990
NORTH CENTRAL	11,218	11,718	.957
SOUTH	14,931	14,292	1.045
WEST	7,040	7,614	.925

Source: Reanalysis of Elementary-Secondary General Information Survey (ELSEGIS) conducted by Office of Education, 1969; and U.S. Department of Health, Education, and Welfare, Office of Education, Statistics of Public Schools, Fall 1968 and Fall 1969, U.S. Government Printing Office, Washington, D. C.

TABLE 2

ESTIMATES OF NURSERY AND KINDERGARTEN ENROLLMENTS REPORTED BY ELSEGIS AND ADOPTED BY THIS STUDY, BY REGION AND TYPE OF DISTRICT, 1968-69
(in thousands)

Region	ELSEGIS	Study
NORTHEAST		
Central Cities	263	304
Other SMSA	336	369
Non-SMSA	163	208
TOTAL	762	881
NORTH CENTRAL		
Central Cities	311	311
Other SMSA	337	354
Non-SMSA	302	310
TOTAL	950	975
SOUTH		
Central Cities	117	217
Other SMSA	76	116
Non-SMSA	59	155
TOTAL	252	488
WEST		
Central Cities	198	195
Other SMSA	227	321
Non-SMSA	92	111
TOTAL	517	627
All Central Cities	889	1,027
All Other SMSA	976	1,160
All Non-SMSA	616	784
TOTAL U.S.	2,481	2,971

Source: Reanalysis of Elementary-Secondary General Information Survey (ELSEGIS) conducted by Office of Education, 1969; and U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 190, "School Enrollments, October 1968 and 1967," U.S. Government Printing Office, Washington, D. C. 1969.

TABLE 3

RATIO OF ELEMENTARY AND SECONDARY SCHOOL STUDENTS TO TOTAL STUDENTS REPORTED BY THE STATES AND BY ELSEGIS, 1968-69 BY REGION

	States		ELSEGIS	
	Elementary	Secondary	Elementary	Secondary
NORTHEAST	.551	.449	.568	.432
NORTH CENTRAL	.606	.394	.581	.419
SOUTH	.591	.409	.593	.407
WEST	.583	.417	.614	.386
TOTAL U. S.	.585	.415	.588	.412

Source: Reanalysis of Elementary-Secondary General Information Survey (ELSEGIS), conducted by Office of Education, 1969; and U.S. Department of Health, Education, and Welfare, Office of Education, Statistics of Public Schools, Fall 1968 and Fall 1969, U.S. Government Printing Office, Washington, D. C.

TABLE 4

RATIO OF PUBLIC SCHOOL STUDENTS ENROLLED IN GRADES 7 AND 8 IN HIGH SCHOOL TO TOTAL GRADES 7 AND 8 ENROLLMENT

NORTHEAST	.843
NORTH CENTRAL	.536
SOUTH	.627
WEST	.579

Source: Computed from information in Department of Health, Education, and Welfare, U.S. Office of Education, National Center for Educational Statistics, Statistics of Public Schools, Fall Enrollment, 1970, Government Printing Office, Washington, D. C., 1971, Tables 4 and 6.

TABLE 5

ENROLLMENT IN PUBLIC SCHOOLS, BY LEVEL OF INSTRUCTION BY EACH REGION AND TYPE OF DISTRICT, ESTIMATED 1967-68, 1968-69 AND PROJECTED 1975-76, 1980-81
(in thousands)

1967-68

Region	N or K	Elementary	Secondary	Total
NORTHEAST				
Central Cities	305	1,441	1,244	2,990
Other SMSA	352	2,187	1,786	4,325
Non-SMSA	208	1,109	773	2,090
TOTAL	865	4,737	3,803	9,405
NORTH CENTRAL				
Central Cities	317	2,071	1,255	3,643
Other SMSA	342	2,556	1,567	4,465
Non-SMSA	304	2,525	1,615	4,444
TOTAL	963	7,152	4,437	12,552
SOUTH				
Central Cities	219	3,005	1,877	5,101
Other SMSA	105	1,668	1,126	2,899
Non-SMSA	151	3,936	2,242	6,329
TOTAL	475	8,609	5,245	14,329
WEST				
Central Cities	194	1,355	1,255	2,804
Other SMSA	313	1,818	1,071	3,202
Non-SMSA	110	1,339	709	2,158
TOTAL	617	4,512	3,035	8,164
All Central Cities	1,035	7,872	5,631	14,538
All Other SMSA	1,112	8,229	5,550	14,891
All Non-SMSA	773	8,909	5,339	15,021
TOTAL U.S.	2,920	25,010	16,520	44,450

1968-69

Region	N or K	Elementary	Secondary	Total
NORTHEAST				
Central Cities	304	1,457	1,220	2,981
Other SMSA	369	2,291	1,899	4,559
Non-SMSA	208	1,102	791	2,101
TOTAL	881	4,850	3,910	9,641
NORTH CENTRAL				
Central Cities	311	2,005	1,266	3,582
Other SMSA	354	2,605	1,663	4,622
Non-SMSA	310	2,530	1,685	4,525
TOTAL	975	7,140	4,614	12,729
SOUTH				
Central Cities	217	2,778	2,055	5,050
Other SMSA	116	1,848	1,246	3,210
Non-SMSA	155	3,799	2,544	6,498
TOTAL	488	8,425	5,845	14,758
WEST				
Central Cities	195	1,324	1,302	2,821
Other SMSA	321	1,825	1,131	3,277
Non-SMSA	111	1,323	737	2,171
TOTAL	627	4,472	3,170	8,269
All Central Cities	1,027	7,564	5,843	14,434
All Other SMSA	1,160	8,569	5,939	15,668
All Non-SMSA	784	8,754	5,757	15,295
TOTAL U.S.	2,971	24,887	17,539	45,397

Enrollment in Public Schools
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1975-76

Region	N or K	Elementary	Secondary	Special Schools	Total
NORTHEAST					
Central Cities	301	1,177	1,330	62	2,870
Other SMSA	380	2,265	2,485	92	5,222
Non-SMSA	174	1,087	1,141	42	2,444
TOTAL	855	4,529	4,956	196	10,536
NORTH CENTRAL					
Central Cities	328	1,558	1,327	66	3,279
Other SMSA	387	2,714	2,330	96	5,527
Non-SMSA	280	2,174	1,912	78	4,444
TOTAL	995	6,446	5,569	240	13,250
SOUTH					
Central Cities	198	2,538	2,153	73	4,962
Other SMSA	146	1,744	1,436	50	3,376
Non-SMSA	135	3,663	3,007	106	6,911
TOTAL	479	7,945	6,596	229	15,249
WEST					
Central Cities	214	1,509	1,242	39	3,004
Other SMSA	372	1,943	1,745	44	4,104
Non-SMSA	97	976	857	33	1,963
TOTAL	683	4,428	3,844	116	9,071
All Central Cities	1,041	6,782	6,052	240	14,115
All Other SMSA	1,285	8,666	7,996	282	18,229
All Non-SMSA	686	7,900	6,917	259	15,762
TOTAL U.S.	3,012	23,348	20,965	781	48,106

1980-81

Region	N or K	Elementary	Secondary	Special Schools	Total
NORTHEAST					
Central Cities	409	1,080	1,273	58	2,820
Other SMSA	538	2,263	2,513	89	5,403
Non-SMSA	242	1,027	1,119	41	2,429
TOTAL	1,189	4,370	4,905	188	10,652
NORTH CENTRAL					
Central Cities	468	1,388	1,276	61	3,193
Other SMSA	572	2,706	2,338	93	5,709
Non-SMSA	366	1,957	1,786	75	4,184
TOTAL	1,406	6,051	5,400	229	13,086
SOUTH					
Central Cities	252	2,405	2,189	69	4,915
Other SMSA	235	1,770	1,563	55	3,623
Non-SMSA	180	3,222	2,853	99	6,354
TOTAL	667	7,397	6,605	223	14,892
WEST					
Central Cities	312	1,466	1,282	37	3,097
Other SMSA	572	1,993	1,855	48	4,468
Non-SMSA	129	895	817	32	1,873
TOTAL	1,013	4,354	3,954	117	9,438
All Central Cities	1,441	6,339	6,020	225	14,025
All Other SMSA	1,917	8,732	8,269	285	19,203
All Non-SMSA	917	7,101	6,575	247	14,840
TOTAL U.S.	4,275	22,172	20,864	757	48,068

Source: 1967-68 and 1968-69 regional totals estimated from U.S. Department of Health, Education, and Welfare, Office of Education, Statistics of Public Schools, Fall 1968 and Fall 1969, and U.S. Bureau of the Census, Current Population Reports, Series P-20, No. 190 "School Enrollment: October 1968 and 1967," U.S. Government Printing Office, Washington, D.C., 1969; Metropolitan status estimated from reanalysis of Elementary and Secondary School General Information Survey (ELSEGIS) conducted by U.S. Office of Education, January 1969; Projections for 1975-76 and 1980-81 from "Projections of School Enrollments for 1975 and 1980" and "Projections of Enrollments by Individual State for 1975 and 1980," Working papers prepared for the President's Commission on School Finance.

TABLE 6

ESTIMATED NUMBER OF TEACHERS BY REGION 1968-69
(in thousands)

	Study	States	NEA
NORTHEAST	424.0	448.5	442.8
NORTH CENTRAL	539.2	555.9	553.9
SOUTH	608.5	601.3	610.5
WEST	343.4	337.2	336.1
U. S.	1,915.1	1,942.9	1,943.3

Source: States: U.S. Department of Health, Education, and Welfare, Office of Education, Fall 1968 Statistics of Public Schools, U.S. Government Printing Office, Washington, D.C.; NEA: National Education Association, Research Division, Estimates of School Statistics, 1969, The Association, Washington, D. C., 1970; Study: See Table 8A.

TABLE 7

PUPIL-TEACHER RATIOS FOR PUBLIC SCHOOLS BY LEVEL OF INSTRUCTION, BY REGION AND TYPE OF DISTRICT, ESTIMATED 1967-68, 1968-69, AND PROJECTED 1975-76, 1980-81

1967-68

Region	N or K	Elementary	Secondary	Total
NORTHEAST				
Central Cities	47.7	23.7	20.4	23.3
Other SMSA	46.0	24.4	19.7	23.0
Non-SMSA	39.9	24.2	20.4	23.5
TOTAL	44.8	24.1	20.1	23.2
NORTH CENTRAL				
Central Cities	54.2	25.8	23.7	26.2
Other SMSA	49.9	24.1	22.2	24.3
Non-SMSA	44.9	22.2	20.0	22.1
TOTAL	49.4	23.7	21.7	24.0
SOUTH				
Central Cities	41.5	28.0	22.2	25.9
Other SMSA	48.5	27.3	21.1	24.8
Non-SMSA	34.0	26.5	21.1	24.4
TOTAL	39.9	27.2	21.5	25.0
WEST				
Central Cities	42.1	26.2	23.9	25.8
Other SMSA	41.0	25.9	22.7	25.6
Non-SMSA	39.8	23.2	19.1	22.1
TOTAL	41.1	25.1	22.2	24.6
All Central Cities	46.8	26.2	22.4	25.4
All Other SMSA	45.6	25.2	21.2	24.3
All Non-SMSA	40.3	24.4	20.4	23.2
TOTAL U.S.	44.4	25.2	21.3	24.2

1968-69

Region	N or K	Elementary	Secondary	Total
NORTHEAST				
Central Cities	46.1	22.9	20.3	22.9
Other SMSA	44.5	23.6	19.6	22.5
Non-SMSA	38.6	23.4	20.3	23.0
TOTAL	43.4	23.4	19.9	22.7
NORTH CENTRAL				
Central Cities	54.0	25.7	23.1	25.9
Other SMSA	49.7	24.0	21.6	24.0
Non-SMSA	44.7	22.1	19.5	21.8
TOTAL	49.2	23.7	21.2	23.6
SOUTH				
Central Cities	38.8	26.2	22.9	25.1
Other SMSA	45.4	25.5	21.8	24.3
Non-SMSA	31.8	24.8	21.8	23.6
TOTAL	37.3	25.4	22.1	24.3
WEST				
Central Cities	40.4	25.1	24.1	25.3
Other SMSA	39.3	24.8	22.9	25.0
Non-SMSA	38.2	22.2	19.3	21.6
TOTAL	39.4	24.1	22.4	24.1
All Central Cities	45.0	25.2	22.6	24.8
All Other SMSA	44.3	24.4	21.2	23.8
All Non-SMSA	39.0	23.4	20.5	22.7
TOTAL U.S.	43.0	24.2	21.4	23.7

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1975-76

Region	N or K	Elementary	Secondary	Total
NORTHEAST				
Central Cities	42.1	20.9	18.9	20.4
Other SMSA	40.7	21.6	18.3	20.1
Non-SMSA	35.3	21.4	18.9	20.2
TOTAL	40.0	21.4	18.6	20.2
NORTH CENTRAL				
Central Cities	46.4	22.1	21.9	22.6
Other SMSA	42.7	20.6	20.4	20.7
Non-SMSA	38.4	19.0	18.4	19.0
TOTAL	42.3	20.4	20.0	20.5
SOUTH				
Central Cities	36.0	24.3	20.5	22.3
Other SMSA	42.1	23.6	19.5	21.3
Non-SMSA	29.5	23.0	19.5	21.0
TOTAL	35.2	23.5	19.8	21.5
WEST				
Central Cities	36.4	22.6	21.9	22.4
Other SMSA	35.4	22.3	20.8	22.1
Non-SMSA	34.4	20.0	17.5	18.8
TOTAL	35.6	21.8	20.3	21.4
All Central Cities	40.5	22.8	20.7	22.0
All Other SMSA	39.7	21.8	19.6	20.9
All Non-SMSA	35.0	21.2	18.8	20.0
TOTAL U.S.	38.8	21.8	19.6	20.9

Pupil-Teacher Ratios for Public Schools
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1980-81

Region	N or K	Elementary	Secondary	Total
NORTHEAST				
Central Cities	39.9	19.8	17.9	19.6
Other SMSA	38.5	20.4	17.3	19.1
Non-SMSA	33.4	20.3	17.9	19.5
TOTAL	37.7	20.2	17.6	19.3
NORTH CENTRAL				
Central Cities	44.0	20.9	20.6	22.0
Other SMSA	40.5	19.5	19.3	20.0
Non-SMSA	36.4	18.0	17.4	18.2
TOTAL	40.4	19.3	18.9	19.8
SOUTH				
Central Cities	34.0	23.0	19.4	21.1
Other SMSA	39.8	22.3	18.4	20.4
Non-SMSA	27.9	21.7	18.4	19.8
TOTAL	33.7	22.2	18.7	20.4
WEST				
Central Cities	34.8	21.6	20.6	21.5
Other SMSA	33.8	21.4	19.6	21.4
Non-SMSA	32.9	19.1	16.5	18.0
TOTAL	34.0	20.9	19.2	20.7
All Central Cities	38.6	21.6	19.5	21.1
All Other SMSA	37.7	20.7	18.5	20.1
All Non-SMSA	33.1	20.0	17.8	19.0
TOTAL U.S.	36.9	20.7	18.6	20.0

Source: 1968-69 based on reanalysis of Elementary-Secondary General Information Survey (ELSEGIS) and adjusted to estimated enrollments for 1968-69; Estimates for 1967-68 and Projections for 1975-76 and 1980-81 based on changes in pupil-teacher ratio as reported by U.S. Department of Health, Education, and Welfare, Office of Education, Enrollments, Teachers and School Housing, Fall 1961, Fall 1962, Fall 1963, and Statistics of Public Schools, Fall 1964, Fall 1965, Fall 1966, Fall 1967, Fall 1968, Fall 1969 and Fall 1970, U.S. Government Printing Office, Washington, D. C.

TABLE 8

PUPIL-TEACHER RATIOS, BY REGION AND LEVEL OF INSTRUCTION
1960-61 TO 1970-71

	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71
NORTHEAST											
Elementary	26.9	27.0	26.7	26.6	25.8	25.4	24.7	24.0	23.2	23.2	22.7
Secondary	20.4	20.4	21.1	20.5	20.5	19.7	19.4	19.1	19.0	18.7	18.4
NORTH CENTRAL											
Elementary	27.2	26.6	27.6	27.5	27.4	27.8	27.4	26.5	26.4	25.7	24.7
Secondary	20.9	21.5	20.3	20.7	20.3	19.2	19.0	19.1	18.6	18.2	18.3
SOUTH											
Elementary	30.2	30.3	30.7	30.5	29.6	26.9	28.3	27.7	25.9	25.2	24.9
Secondary	22.7	22.1	22.2	22.2	22.4	22.0	21.1	21.2	21.9	21.6	20.9
WEST											
Elementary	28.7	28.8	28.3	28.1	28.0	27.3	26.8	26.4	25.3	24.6	24.6
Secondary	23.1	23.4	23.9	23.8	22.8	22.4	22.7	22.5	22.7	22.4	22.6
TOTAL U. S.											
Elementary	28.4	28.3	28.5	28.4	27.8	27.5	27.0	26.3	25.4	24.8	24.3
Secondary	21.7	21.7	21.7	21.6	21.4	20.7	20.4	20.3	20.3	20.0	19.8

Source: U.S. Department of Health, Education, and Welfare, Office of Education, Enrollments, Teachers and School Housing, Fall 1961, Fall 1962, Fall 1963; and Statistics of Public Schools, Fall 1964, Fall 1965, Fall 1966, Fall 1967, Fall 1968, Fall 1969, and Fall 1970, U. S. Government Printing Office, Washington, D. C.

TABLE 8A

PUBLIC SCHOOL CLASSROOM TEACHERS BY LEVEL OF INSTRUCTION, BY REGION AND TYPE OF DISTRICT, ESTIMATED 1967-68, 1968-69 and PROJECTED 1975-76, 1980-81

(in thousands)

1967-68

Region	N or K	Elementary	Secondary	Total
NORTHEAST				
Central Cities	6.4	60.8	61.0	128.2
Other SMSA	7.7	89.6	90.7	188.0
Non-SMSA	5.2	45.8	37.9	88.9
TOTAL	19.3	196.2	189.6	405.1
NORTH CENTRAL				
Central Cities	5.8	80.3	53.0	139.1
Other SMSA	6.9	106.1	70.6	183.6
Non-SMSA	6.8	113.7	80.8	201.3
TOTAL	19.5	300.1	204.4	524.0
SOUTH				
Central Cities	5.3	107.3	84.5	197.1
Other SMSA	2.2	61.1	53.4	116.7
Non-SMSA	4.4	148.5	106.3	259.2
TOTAL	11.9	316.9	244.2	573.0
WEST				
Central Cities	4.6	51.7	52.5	108.8
Other SMSA	7.6	70.2	47.2	125.0
Non-SMSA	2.8	57.7	37.1	97.6
TOTAL	15.0	179.6	136.8	331.4
All Central Cities	22.1	300.1	251.0	573.2
All Other SMSA	24.4	327.0	261.9	613.3
All Non-SMSA	19.2	365.7	262.1	647.0
TOTAL U.S.	65.7	992.8	775.0	1,833.5

Public School Classroom Teachers by Level of Instruction
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1968-69

Region	N or K	Elementary	Secondary	Total
NORTHEAST				
Central Cities	6.6	63.7	60.1	130.4
Other SMSA	8.3	96.9	97.0	202.2
Non-SMSA	5.4	47.0	39.0	91.4
TOTAL	20.3	207.6	196.1	424.0
NORTH CENTRAL				
Central Cities	5.8	78.0	54.7	138.5
Other SMSA	7.1	108.6	77.1	192.8
Non-SMSA	6.9	114.7	86.3	207.9
TOTAL	19.8	301.3	218.1	539.2
SOUTH				
Central Cities	5.6	106.0	89.9	201.5
Other SMSA	2.6	72.5	57.1	132.2
Non-SMSA	4.9	153.0	116.9	274.8
TOTAL	13.1	331.5	263.9	608.5
WEST				
Central Cities	4.8	52.7	54.1	111.6
Other SMSA	8.2	73.7	49.4	131.3
Non-SMSA	2.9	59.5	38.1	100.5
TOTAL	15.9	185.9	141.6	343.4
All Central Cities	22.8	300.4	258.8	582.0
All Other SMSA	26.2	351.7	280.6	658.5
All Non-SMSA	20.1	374.2	280.3	674.6
TOTAL U.S.	69.1	1,026.3	819.7	1,915.1

Public School Classroom Teachers by Level of Instruction
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1975-76

Region	N or K	Elementary	Secondary	Special Schools	Total
NORTHEAST					
Central Cities	7.2	56.3	70.4	6.6	140.5
Other SMSA	9.3	104.9	135.8	10.3	260.3
Non-SMSA	4.9	50.8	60.4	4.6	120.7
TOTAL	21.4	212.0	266.6	21.5	521.5
NORTH CENTRAL					
Central Cities	7.1	70.5	60.6	6.9	145.1
Other SMSA	9.1	131.7	114.2	11.4	266.4
Non-SMSA	7.3	114.4	103.9	8.3	233.9
TOTAL	23.5	316.6	278.7	26.6	645.4
SOUTH					
Central Cities	5.5	104.4	105.0	7.9	222.8
Other SMSA	3.5	73.9	73.6	7.6	158.6
Non-SMSA	4.6	159.3	154.2	11.1	329.2
TOTAL	13.6	337.6	332.8	26.6	710.6
WEST					
Central Cities	5.9	66.8	56.7	4.7	134.1
Other SMSA	10.5	87.1	83.9	4.0	185.5
Non-SMSA	2.8	48.8	49.0	3.7	104.3
TOTAL	19.2	202.7	189.6	12.4	423.9
All Central Cities	25.7	298.0	292.7	26.1	642.5
All Other SMSA	32.4	397.6	407.5	33.3	870.8
All Non-SMSA	19.6	373.3	367.5	27.7	788.1
TOTAL U.S.	77.7	1,068.9	1,067.7	87.1	2,301.4

Public School Classroom Teachers by Level of Instruction
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1980-81

Region	N or K	Elementary	Secondary	Special Schools	Total
NORTHEAST					
Central Cities	10.3	54.5	71.1	8.0	143.9
Other SMSA	14.0	110.9	145.3	12.0	282.2
Non-SMSA	7.2	50.6	62.5	4.5	124.8
TOTAL	31.5	216.0	278.9	24.5	550.9
NORTH CENTRAL					
Central Cities	10.6	66.4	61.9	6.9	145.8
Other SMSA	14.1	138.8	121.1	11.4	285.4
Non-SMSA	10.1	108.7	102.6	8.3	229.7
TOTAL	34.8	313.9	285.6	26.6	660.9
SOUTH					
Central Cities	7.4	104.6	112.8	7.9	232.7
Other SMSA	5.9	79.4	84.9	7.6	177.8
Non-SMSA	6.5	148.5	155.1	11.1	321.2
TOTAL	19.8	332.5	352.8	26.6	731.7
WEST					
Central Cities	9.0	67.9	62.2	4.7	143.8
Other SMSA	16.9	93.1	94.6	4.0	208.6
Non-SMSA	3.9	46.9	49.5	3.7	104.0
TOTAL	29.8	207.9	206.3	12.4	456.4
All Central Cities	37.3	293.4	308.0	27.5	666.2
All Other SMSA	50.9	422.2	445.9	35.0	954.0
All Non-SMSA	27.7	354.7	369.7	27.6	779.7
TOTAL U.S.	115.9	1,070.3	1,123.6	90.1	2,399.9

Source: See Tables 5 and 7

TABLE 9

NUMBER OF PROFESSIONAL INSTRUCTIONAL PERSONNEL IN PUBLIC SCHOOLS BY REGION, 1960-61, 1962-63, 1964-65, 1966-67, 1968-69

(in thousands)

		1960-61 Non-Teaching		
Region	Classroom Teachers	Supervisory	Non-Supervisory	Total
NORTHEAST	315.2	19.6	8.1	342.9
NORTH CENTRAL	410.5	22.3	9.7	442.5
SOUTH	447.9	25.9	8.0	481.8
WEST	229.6	15.5	9.6	254.7
TOTAL U.S.	1,403.2	83.3	35.3	1,521.8

		1962-63 Non-Teaching		
Region	Classroom Teachers	Supervisory	Non-Supervisory	Total
NORTHEAST	343.0	20.0	14.7	377.7
NORTH CENTRAL	434.5	24.2	14.8	473.6
SOUTH	479.5	26.4	11.4	517.4
WEST	255.6	17.2	9.8	282.6
TOTAL U.S.	1,512.6	87.8	50.7	1,651.3

1964-65

Region	Classroom Teachers	Non-Teaching		Total
		Supervisory	Non-Supervisory	
NORTHEAST	371.9	22.2	21.5	415.6
NORTH CENTRAL	466.8	26.0	15.5	508.3
SOUTH	515.8	28.6	15.4	559.9
WEST	282.2	18.2	12.3	312.7
TOTAL U.S.	1,636.8	95.0	64.7	1,796.5

1966-67

Region	Classroom Teachers	Non-Teaching		Total
		Supervisory	Non-Supervisory	
NORTHEAST	405.9	26.7	27.8	460.4
NORTH CENTRAL	510.7	29.7	19.2	559.6
SOUTH	564.6	32.1	22.2	618.9
WEST	306.2	20.5	15.1	341.8
TOTAL U.S.	1,787.4	109.0	84.3	1,980.7

Number of Professional Instructional Personnel in Public Schools
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		1967-68		
		Non-Teaching		
Region	Classroom Teachers	Supervisory	Non-Supervisory	Total
NORTHEAST	422.0	31.7	28.7	482.4
NORTH CENTRAL	533.9	27.7	21.8	583.5
SOUTH	587.5	33.9	21.7	643.1
WEST	319.9	21.5	17.4	358.8
TOTAL U.S.	1,863.3	114.8	89.6	2,067.7

		1968-69		
		Non-Teaching		
Region	Classroom Teachers	Supervisory	Non-Supervisory	Total
NORTHEAST	442.8	33.7	33.0	509.5
NORTH CENTRAL	553.9	29.6	18.9	602.4
SOUTH	610.5	34.6	24.0	669.1
WEST	336.1	23.1	18.5	377.7
TOTAL U.S.	1,943.3	121.0	94.4	2,158.7

Source: National Education Association, Research Division, Estimates of School Statistics, 1961-62, 1963-64, 1965-66, 1967-68, 1968-69, 1969-70, Annual Research Report, The Association, Washington, D.C.

TABLE 10

NON-TEACHING PROFESSIONAL AND NON-PROFESSIONAL INSTRUCTIONAL PERSONNEL BY REGION AND TYPE OF DISTRICT, ESTIMATED 1968-69

(In Thousands)

	Supervisory			Non-Supervisory				
Region	Principals and Asst. Principals	Supervisors of Instruction	Total	Librarians	Counselors	Psycho-logical	Audio Visual	Total
NORTHEAST								
Central Cities	5.8	3.3	9.1	1.4	3.7	1.1	.2	6.5
Other SMSA	8.8	4.9	13.7	4.1	5.6	1.2	.4	11.2
Non-SMSA	3.3	1.3	4.6	1.8	1.9	.3	.1	4.0
TOTAL	17.9	9.5	27.4	7.3	11.2	2.6	.7	21.7
NORTH CENTRAL								
Central Cities	6.6	2.3	8.9	2.6	3.9	.4	.2	7.1
Other SMSA	8.8	1.9	10.7	3.8	5.5	.6	.4	10.3
Non-SMSA	10.4	2.4	12.8	4.5	4.4	.4	.5	9.7
TOTAL	25.8	6.6	32.4	10.9	13.8	1.4	1.1	27.1
SOUTH								
Central Cities	9.3	2.6	11.9	4.9	4.2	.4	.2	9.7
Other SMSA	6.6	1.5	8.1	3.2	2.7	.1	.1	6.1
Non-SMSA	15.1	2.7	17.8	7.2	4.6	.1	.1	12.0
TOTAL	31.0	6.8	37.8	15.3	11.5	.6	.4	27.8
WEST								
Central Cities	5.3	1.8	7.1	1.5	3.3	.5	.4	5.7
Other SMSA	6.4	1.4	7.8	1.9	3.4	.8	.2	6.3
Non-SMSA	5.4	.8	6.2	2.3	1.6	.3	.1	4.3
TOTAL	17.1	4.0	21.1	5.7	8.3	1.6	.7	16.3
All Central Cities	27.0	10.0	37.0	10.4	15.1	2.4	1.0	29.0
All Other SMSA	30.6	9.7	40.3	13.0	17.2	2.7	1.1	33.9
All Non-SMSA	34.2	7.2	41.4	15.8	12.5	1.1	.8	30.0
TOTAL U.S.	91.8	26.9	118.7	39.2	44.8	6.2	2.9	92.9

Non-Teaching Professional and Non-Professional Instructional Personnel - Estimated 1968-69
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Region	Total Professional	Non-Professional Aides	Non-Professional Secretaries	Non-Professional Total	Total Non-Teaching
NORTHEAST					
Central Cities	15.6	6.6	8.0	14.6	30.2
Other SMSA	24.9	8.1	16.3	24.4	49.3
Non-SMSA	8.6	3.8	6.5	10.3	18.9
TOTAL	49.1	18.5	30.8	49.3	98.4
NORTH CENTRAL					
Central Cities	16.0	5.5	13.0	18.5	34.5
Other SMSA	21.0	3.3	17.6	20.9	41.9
Non-SMSA	22.5	5.5	17.3	22.8	45.3
TOTAL	59.5	14.3	47.9	62.2	121.7
SOUTH					
Central Cities	21.6	5.8	12.4	18.2	39.8
Other SMSA	14.2	2.5	7.7	10.2	24.4
Non-SMSA	29.8	14.0	11.7	25.7	55.5
TOTAL	65.6	22.3	31.8	54.1	119.7
WEST					
Central Cities	12.8	5.5	11.8	17.3	30.1
Other SMSA	14.1	5.3	11.9	17.2	31.3
Non-SMSA	10.5	5.1	6.7	11.8	22.3
TOTAL	37.4	15.9	30.4	46.3	83.7
All Central Cities	66.0	23.4	45.2	68.6	134.6
All Other SMSA	74.2	19.2	53.5	72.7	146.9
All Non-SMSA	71.4	28.4	42.2	70.6	142.0
TOTAL U.S.	211.6	71.0	140.9	211.9	423.5

Source: Reanalysis of Elementary-Secondary General Information Survey (ELSEGIS), conducted by Office of Education, 1969

TABLE 11

RATIO OF NON-TEACHING PROFESSIONAL INSTRUCTIONAL PERSONNEL TO CLASSROOM TEACHERS, 1960-61, 1962-63, 1964-65, 1966-67, 1967-68, 1968-69, BY REGION

	1960-61		1962-63		1964-65	
	Supervisory	Non-Supervisory	Supervisory	Non-Supervisory	Supervisory	Non-Supervisory
NORTHEAST	.062	.026	.058	.043	.060	.058
NORTH CENTRAL	.054	.024	.056	.034	.056	.033
SOUTH	.058	.018	.055	.024	.055	.030
WEST	.068	.042	.067	.038	.065	.044
U. S.	.059	.025	.058	.034	.058	.040

	1966-67		1967-68		1968-69	
	Supervisory	Non-Supervisory	Supervisory	Non-Supervisory	Supervisory	Non-Supervisory
NORTHEAST	.066	.069	.075	.068	.076	.075
NORTH CENTRAL	.058	.038	.052	.041	.053	.034
SOUTH	.057	.039	.058	.037	.057	.039
WEST	.067	.049	.067	.054	.069	.055
U. S.	.061	.047	.062	.048	.062	.049

Source: See Table 9

TABLE 12

GROWTH RATIOS FOR NON-TEACHING PROFESSIONAL INSTRUCTIONAL PERSONNEL AS A PER CENT OF CLASSROOM TEACHERS, BY REGION

	1968-69 to 1975-76		1968-69 to 1980-81	
	Supervisory	Non-Supervisory	Supervisory	Non-Supervisory
NORTHEAST	1.20	1.25	1.25	1.30
NORTH CENTRAL	1.00	1.05	1.00	1.25
SOUTH	1.00	1.10	1.00	1.30
WEST	1.05	1.20	1.10	1.30

Source: Rates based on growth 1960-61 to 1968-69 as reported by National Education Association. See Table 11.

TABLE 13

RATIO OF NON-TEACHING PROFESSIONAL INSTRUCTIONAL PERSONNEL TO CLASSROOM TEACHERS, ESTIMATED 1968-69, PROJECTED 1975-76 AND 1980-81 BY REGION AND TYPE OF DISTRICT

	1968-69		1975-76		1980-81	
	Supervisory	Non-Supervisory	Supervisory	Non-Supervisory	Supervisory	Non-Supervisory
NORTHEAST						
Central Cities	.070	.050	.084	.063	.088	.065
Other SMSA	.068	.055	.082	.069	.085	.072
Non-SMSA	.051	.045	.061	.056	.064	.059
NORTH CENTRAL						
Central Cities	.064	.051	.064	.054	.064	.064
Other SMSA	.056	.054	.056	.057	.056	.068
Non-SMSA	.062	.047	.062	.049	.062	.059
SOUTH						
Central Cities	.060	.049	.060	.054	.060	.064
Other SMSA	.062	.046	.062	.051	.062	.060
Non-SMSA	.065	.044	.065	.048	.065	.057
WEST						
Central Cities	.063	.051	.066	.061	.069	.066
Other SMSA	.060	.049	.063	.059	.066	.064
Non-SMSA	.062	.043	.065	.052	.068	.056

Source: See Tables 11 and 12.

TABLE 14

NON-PROFESSIONALS: SALARIES, ESTIMATED OUTLAYS, EMPLOYMENT, STUDENTS/NON-PROFESSIONAL RATIO

1967-68

Region	Salary (dollars)	Expenditures (millions of dollars)	Number of Non-Professionals (thousands)	Students Per Non-Professional
NORTHEAST				
Central Cities	4,402	52.8	12.0	245
Other SMSA	4,324	76.7	17.7	256
Non-SMSA	3,798	26.6	7.0	293
TOTAL	4,253	156.1	36.7	260
NORTH CENTRAL				
Central Cities	4,700	58.9	12.3	291
Other SMSA	4,528	64.0	14.1	327
Non-SMSA	3,537	47.3	13.4	337
TOTAL	4,274	170.2	39.8	319
SOUTH				
Central Cities	3,759	75.5	20.1	246
Other SMSA	4,060	40.7	9.6	330
Non-SMSA	3,121	65.4	20.9	306
TOTAL	3,581	181.6	50.6	287
WEST				
Central Cities	5,186	77.6	15.0	188
Other SMSA	5,255	81.6	15.5	211
Non-SMSA	5,051	31.8	6.3	314
TOTAL	5,204	191.0	36.8	222
All Central Cities	4,458	264.8	59.4	245
All Other SMSA	4,622	263.0	56.9	262
All Non-SMSA	3,592	171.1	47.6	316
TOTAL U.S.	4,263	698.9	163.9	271

Source: Salaries based on reanalysis of 24th Biennial Salary Survey of Public School Professional Personnel, conducted by Research Division of National Education Association; Expenditures from reanalysis of Elementary-Secondary General Information Survey (ELSEGIS), conducted by Office of Education, 1969 and 1970.

TABLE 15

NUMBER OF INSTRUCTIONAL PERSONNEL, PROFESSIONAL AND NON-PROFESSIONAL BY REGION AND TYPE OF DISTRICT, ESTIMATED 1967-68 AND PROJECTED 1975-76 AND 1980-81

(in thousands)

	1967-68						
		Professionals			Total		
	Non-Professionals	Classroom Teachers	Supervisory	Non-Supervisory	Non-Teaching Professionals	All Professionals	Total Instructional Staff
NORTHEAST							
Central Cities	12.0	128.2	8.7	6.2	14.9	143.1	155.1
Other SMSA	17.7	188.0	12.6	10.3	22.9	210.9	228.6
Non-SMSA	7.0	88.9	4.1	3.6	7.7	96.6	103.6
TOTAL	36.7	405.1	25.4	20.1	45.5	450.6	487.3
NORTH CENTRAL							
Central Cities	12.3	139.1	8.9	7.1	16.0	155.1	167.4
Other SMSA	14.1	183.6	10.2	9.8	20.0	203.6	217.7
Non-SMSA	13.4	201.3	12.5	9.5	22.0	223.3	236.7
TOTAL	39.8	524.0	31.6	26.4	58.0	582.0	621.8
SOUTH							
Central Cities	20.1	197.1	11.0	9.0	20.0	217.1	237.2
Other SMSA	9.6	116.7	7.0	5.3	12.3	129.0	138.6
Non-SMSA	20.9	259.2	16.1	10.9	27.0	286.2	307.1
TOTAL	50.6	573.0	34.1	25.2	59.3	632.3	682.9
WEST							
Central Cities	15.0	108.8	7.1	5.7	12.8	121.6	136.6
Other SMSA	15.5	125.0	6.8	5.5	12.3	137.3	152.8
Non-SMSA	6.3	97.6	5.9	4.1	10.0	107.6	113.9
TOTAL	36.8	331.4	19.8	15.3	35.1	366.5	403.3
All Central Cities	59.4	573.2	35.7	28.0	63.7	636.9	696.3
All Other SMSA	56.9	613.3	36.6	30.9	67.5	680.8	737.7
All Non-SMSA	47.6	647.0	38.6	28.1	66.7	713.7	761.3
TOTAL U. S.	163.9	1,833.5	110.9	87.0	197.9	2,031.4	2,195.3

PROJECTED NUMBER OF INSTRUCTIONAL PERSONNEL
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	1975-76						
		Professionals			Total		
	Non-Professionals	Classroom Teachers	Supervisory	Non-Supervisory	Non-Teaching Professionals	All Professionals	Instructional Staff
NORTHEAST							
Central Cities	11.7	140.5	11.8	8.9	20.7	161.2	172.9
Other SMSA	20.4	260.3	21.3	18.0	39.3	299.6	320.0
Non-SMSA	8.3	120.7	7.4	6.8	14.2	134.9	143.2
TOTAL	40.4	521.5	40.5	33.7	74.2	595.7	636.1
NORTH CENTRAL							
Central Cities	11.3	145.1	9.3	7.8	17.1	162.2	173.5
Other SMSA	16.9	266.4	14.9	15.2	30.1	296.5	313.4
Non-SMSA	13.2	233.9	14.5	11.5	26.0	259.9	273.1
TOTAL	41.4	645.4	38.7	34.5	73.2	718.6	760.0
SOUTH							
Central Cities	20.2	222.8	13.4	12.0	25.4	248.2	268.4
Other SMSA	10.2	158.6	9.8	8.1	17.9	176.5	186.7
Non-SMSA	22.6	329.2	21.4	15.8	37.2	366.4	389.0
TOTAL	53.0	710.6	44.6	35.9	80.5	791.1	844.1
WEST							
Central Cities	16.0	134.1	8.9	8.2	17.1	151.2	167.2
Other SMSA	19.5	185.5	11.7	10.9	22.6	208.1	227.6
Non-SMSA	6.3	104.3	6.8	5.4	12.2	116.5	122.8
TOTAL	41.8	423.9	27.4	24.5	51.9	475.8	517.6
All Central Cities	59.2	642.5	43.4	36.9	80.3	722.8	782.0
All Other SMSA	67.0	870.8	57.7	52.2	109.9	980.7	1,047.7
All Non-SMSA	50.4	788.1	50.1	39.5	89.6	877.7	928.1
TOTAL U. S.	176.6	2,301.4	151.2	128.6	279.8	2,581.2	2,757.8

PROJECTED NUMBER OF INSTRUCTIONAL PERSONNEL
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	1980-81						
		Professionals				Total	
	Non-Profes-sionals	Classroom Teachers	Supervisory	Non-Supervisory	Non-Teaching Professionals	All Professionals	Instructional Staff
NORTHEAST							
Central Cities	11.5	143.9	12.7	9.4	22.1	166.0	177.5
Other SMSA	21.1	282.2	24.0	20.3	44.3	326.5	347.6
Non-SMSA	8.3	124.8	8.0	7.4	15.4	140.2	148.5
TOTAL	40.9	550.9	44.7	37.1	81.8	632.7	673.6
NORTH CENTRAL							
Central Cities	11.0	145.8	9.3	9.3	18.6	164.4	175.4
Other SMSA	17.5	285.4	16.0	19.4	35.4	320.8	338.3
Non-SMSA	12.4	229.7	14.2	13.6	27.8	257.5	269.9
TOTAL	40.9	660.9	39.5	42.3	81.8	742.7	783.6
SOUTH							
Central Cities	20.0	232.7	14.0	14.9	28.9	261.6	281.6
Other SMSA	11.0	177.8	11.0	10.7	21.7	199.5	210.5
Non-SMSA	20.8	321.2	20.9	18.3	39.2	360.4	381.2
TOTAL	51.8	731.7	45.9	43.9	89.8	821.5	873.3
WEST							
Central Cities	16.5	143.8	9.9	9.5	19.4	163.2	179.7
Other SMSA	21.2	208.6	13.8	13.4	27.2	235.8	257.0
Non-SMSA	6.0	104.0	7.1	5.8	12.9	116.9	122.9
TOTAL	43.7	456.4	30.8	28.7	59.5	515.9	559.6
All Central Cities	59.0	666.2	45.9	43.1	89.0	755.2	814.2
All Other SMSA	70.8	954.0	64.8	63.8	128.6	1,082.6	1,153.4
All Non-SMSA	47.5	779.7	50.2	45.1	95.3	875.0	922.5
TOTAL U. S.	177.3	2,399.9	160.9	152.0	312.9	2,712.8	2,890.1

SOURCE: See Tables 8A, 13 and 14

TABLE 16

AVERAGE SALARIES OF PROFESSIONAL INSTRUCTIONAL PERSONNEL, BY REGION, 1960-61, 1962-63, 1964-65, 1966-67, 1967-68, 1968-69

(In Current Dollars)

	1960-61			1962-63		
Region	Classroom Teachers	Non-Teaching	All Professional	Classroom Teachers	Non-Teaching	All Professional
NORTHEAST	5,876	8,426	6,082	6,341	8,398	6,530
NORTH CENTRAL	5,307	7,008	5,430	5,786	7,877	5,957
SOUTH	4,412	6,018	4,525	4,845	6,829	4,989
WEST	6,047	8,493	6,288	6,449	9,233	6,715
TOTAL U.S.	5,275	7,501	5,449	5,732	7,994	5,921

	1964-65			1966-67		
Region	Classroom Teachers	Non-Teaching	All Professional	Classroom Teachers	Non-Teaching	All Professional
NORTHEAST	6,862	10,134	7,206	7,400	10,847	7,808
NORTH CENTRAL	6,178	8,628	6,378	6,813	9,125	7,015
SOUTH	5,227	7,758	5,425	5,919	8,495	6,145
WEST	7,074	10,867	7,444	7,743	11,507	8,135
TOTAL U.S.	6,195	9,232	6,465	6,830	9,894	7,129

Average Salaries of Professional Instructional Personnel
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	1967-68			1968-69		
Region	Classroom Teachers	Non-Teaching	All Professional	Classroom Teachers	Non-Teaching	All Professional
NORTHEAST	7,948	10,584	8,278	8,498	11,294	8,864
NORTH CENTRAL	7,581	10,260	7,805	8,112	11,341	8,372
SOUTH	6,436	9,281	6,682	6,914	9,677	7,156
WEST	8,248	11,486	8,599	8,799	12,694	9,228
TOTAL U.S.	7,432	10,316	7,709	7,952	11,159	8,272

Source: National Education Association, Research Division, Estimates of School Statistics, 1961-62, 1963-64, 1965-66, 1967-68, 1968-69, 1969-70, Annual Research Report, The Association, Washington, D.C.

TABLE 17

ESTIMATED AVERAGE SALARIES OF PROFESSIONAL INSTRUCTIONAL PERSONNEL
BY REGION AND BY TYPE OF DISTRICT, 1968-69

		Supervisory			Non-Supervisory				
Region	Classroom Teachers	Principals & Asst. Prin.	Supervisors of Instr'n.	All	Counsellors	Librarians	Psychologists	Audio-Visual	All
NORTHEAST									
Central Cities	9,027	13,137	13,045	13,102	9,712	8,416	9,084	12,460	9,417
Other SMSA	8,492	13,419	11,841	12,856	10,452	8,728	10,712	12,254	9,918
Non-SMSA	7,754	11,736	9,955	11,242	9,297	7,257	9,707	10,292	8,462
TOTAL	8,498	13,014	12,002	12,665	10,012	8,308	9,880	11,997	9,498
NORTH CENTRAL									
Central Cities	8,739	14,434	14,070	14,341	10,435	10,642	10,628	13,905	10,629
Other SMSA	8,388	13,807	14,107	13,860	10,574	8,653	9,573	13,786	9,923
Non-SMSA	7,443	10,731	9,975	10,592	9,583	7,844	9,608	11,132	8,856
TOTAL	8,112	12,726	12,603	12,701	10,219	8,790	9,893	12,663	9,725
SOUTH									
Central Cities	7,217	11,833	11,631	11,789	8,770	7,620	8,821	11,045	8,232
Other SMSA	7,333	12,664	12,642	12,660	10,129	7,388	9,698	11,062	8,680
Non-SMSA	6,492	9,676	9,804	9,695	7,829	6,838	6,471	10,539	7,249
TOTAL	6,914	10,961	11,128	10,991	8,715	7,204	8,548	10,865	7,906
WEST									
Central Cities	9,188	14,331	14,926	14,481	10,712	9,415	11,333	14,457	10,661
Other SMSA	9,079	14,943	14,605	14,884	11,390	9,758	11,600	15,124	11,068
Non-SMSA	7,998	11,989	11,747	11,957	9,494	8,479	10,764	13,353	9,161
TOTAL	8,799	13,827	14,153	13,889	10,749	9,158	11,352	14,511	10,422
All Central Cities	8,363	13,240	13,252	13,242	9,855	8,734	9,736	13,270	9,560
All Other SMSA	8,346	13,687	12,803	13,476	10,624	8,525	10,679	13,382	9,912
All Non-SMSA	7,180	10,561	10,113	10,484	7,795	7,408	9,619	11,214	8,205
TOTAL U.S.	7,952	12,392	12,248	12,359	9,510	8,131	10,124	12,730	9,250

Source: Reanalysis of 24th Biennial Salary Survey of Public School Professional Personnel, conducted by Research Division of National Education Association.

TABLE 18

RATIO OF REGIONAL GROWTH RATES OF INSTRUCTIONAL SALARIES TO GROWTH RATE FOR TOTAL U. S.

	1975-76	1980-81
NORTHEAST	.976	.961
NORTH CENTRAL	.991	.987
SOUTH	1.049	1.081
WEST	.953	.925
TOTAL U. S.	1.000	1.000

Source: U.S. Department of Commerce, Office of Business Economics, Survey of Current Business Vol. 50, No. 8, August 1970, Table 2 - Per Capita Personal Income by States and Regions, 1948-69, p. 38.

TABLE 19

PROJECTED AVERAGE SALARIES FOR PROFESSIONAL AND NON-PROFESSIONAL INSTRUCTIONAL PERSONNEL BY REGION AND TYPE OF DISTRICT, 1975-76 and 1980-81
(in 1967-68 Dollars)

1975-76

	Professionals			
	Classroom Teachers	Supervisory	Non-Supervisory	Non-Professionals
NORTHEAST				
Central Cities	10,570	15,958	10,820	5,520
Other SMSA	9,944	15,659	11,396	5,422
Non-SMSA	9,080	13,693	9,723	4,763
TOTAL	9,913	15,958	10,890	5,314
NORTH CENTRAL				
Central Cities	10,389	17,725	12,393	5,987
Other SMSA	9,972	17,131	11,570	5,769
Non-SMSA	8,849	13,092	10,326	4,506
TOTAL	9,659	15,760	11,342	5,428
SOUTH				
Central Cities	9,084	15,290	10,076	5,300
Other SMSA	9,230	16,420	10,624	5,725
Non-SMSA	8,172	12,574	8,873	4,401
TOTAL	8,694	14,235	9,671	5,000
WEST				
Central Cities	10,487	17,290	12,004	6,353
Other SMSA	10,363	17,771	12,463	6,437
Non-SMSA	9,129	14,277	10,315	6,187
TOTAL	10,099	16,748	11,833	6,366
All Central Cities	9,996	16,403	11,173	5,760
All Other SMSA	9,912	16,596	11,550	5,851
All Non-SMSA	8,639	13,120	9,638	4,712
TOTAL U. S.	9,499	15,389	10,855	5,495

PROJECTED AVERAGE SALARIES FOR INSTRUCTIONAL PERSONNEL
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	1980-81			
	Professionals			
	Classroom Teachers	Supervisory	Non-Supervisory	Non-Professionals
NORTHEAST				
Central Cities	11,303	18,697	11,997	5,903
Other SMSA	10,634	18,346	12,636	5,798
Non-SMSA	9,710	16,042	10,781	5,093
TOTAL	10,599	18,034	12,105	5,685
NORTH CENTRAL				
Central Cities	11,229	20,938	13,860	6,472
Other SMSA	10,778	20,236	12,940	6,235
Non-SMSA	9,565	15,464	11,548	4,870
TOTAL	10,447	18,662	12,683	5,879
SOUTH				
Central Cities	10,162	18,721	11,673	5,668
Other SMSA	10,325	20,104	12,308	6,122
Non-SMSA	9,141	15,396	10,279	4,706
TOTAL	9,753	17,538	11,246	5,378
WEST				
Central Cities	11,043	19,926	13,102	6,690
Other SMSA	10,913	20,480	13,603	6,779
Non-SMSA	9,613	16,453	11,259	6,516
TOTAL	10,658	19,373	12,965	6,709
All Central Cities	10,828	19,411	12,518	6,256
All Other SMSA	10,681	19,565	12,876	6,249
All Non-SMSA	9,420	15,667	10,871	5,046
TOTAL U. S.	10,310	18,302	12,179	5,893

SOURCE: See text and Table 17

TABLE 20

SALARY COSTS (UNADJUSTED) FOR PROFESSIONAL AND NON-PROFESSIONAL INSTRUCTIONAL PERSONNEL
BY REGION AND TYPE OF DISTRICT, ESTIMATED 1967-68 AND PROJECTED 1975-76 AND 1980-81

(In Millions of 1967-68 Dollars)

1967-68

		Professionals			Total		Total
	Non-Profes-sionals	Classroom Teachers	Supervisory	Non-Supervisory	Non-Teaching Professionals	All Professionals	Instructional Staff
NORTHEAST							
Central Cities	52.8	1,080.6	106.2	54.5	160.7	1,241.3	1,294.1
Other SMSA	76.7	1,490.8	151.7	95.7	247.4	1,738.2	1,814.9
Non-SMSA	26.6	643.7	43.4	28.4	71.8	715.5	742.1
TOTAL	156.1	3,215.1	301.3	178.6	479.9	3,695.0	3,851.1
NORTH CENTRAL							
Central Cities	58.9	1,134.4	120.8	71.4	192.2	1,326.6	1,385.5
Other SMSA	64.0	1,437.0	132.1	91.0	223.1	1,660.1	1,724.1
Non-SMSA	47.3	1,398.2	123.5	78.2	201.7	1,599.9	1,647.2
TOTAL	170.2	3,969.6	376.4	240.6	617.0	4,586.6	4,756.8
SOUTH							
Central Cities	75.5	1,328.3	121.4	69.1	190.5	1,518.8	1,594.3
Other SMSA	40.7	799.0	83.2	42.9	126.1	925.1	965.8
Non-SMSA	65.4	1,571.3	146.0	73.6	219.6	1,790.9	1,856.3
TOTAL	181.6	3,698.6	350.6	185.6	536.2	4,234.8	4,416.4
WEST							
Central Cities	77.6	931.4	95.5	56.4	151.9	1,083.3	1,160.9
Other SMSA	81.6	1,057.5	94.4	56.6	151.0	1,208.5	1,290.1
Non-SMSA	31.8	727.3	66.1	35.2	101.3	828.6	860.4
TOTAL	191.0	2,716.2	256.0	148.2	404.2	3,120.4	3,311.4
All Central Cities	264.8	4,474.7	443.9	251.4	695.3	5,170.0	5,434.8
All Other SMSA	263.0	4,784.3	461.4	286.2	747.6	5,531.9	5,794.9
All Non-SMSA	171.1	4,340.5	379.0	215.4	594.4	4,934.9	5,106.0
TOTAL U. S.	698.9	13,599.5	1,284.3	753.0	2,037.3	15,636.8	16,335.7

PROJECTED INSTRUCTIONAL SALARY COSTS
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1975-76

		Professionals			Total		
	Non-Profes-sionals	Classroom Teachers	Supervisory	Non-Supervisory	Non-Teaching Professionals	All Professionals	Instructional Staff
NORTHEAST							
Central Cities	64.6	1,485.1	188.3	96.3	284.6	1,769.7	1,834.3
Other SMSA	110.6	2,588.4	333.5	205.1	538.6	3,127.0	3,237.6
Non-SMSA	39.5	1,096.0	101.3	66.1	167.4	1,263.4	1,302.9
TOTAL	214.7	5,169.5	623.1	367.5	990.6	6,160.1	6,374.8
NORTH CENTRAL							
Central Cities	67.7	1,507.4	164.8	96.7	261.5	1,768.9	1,836.6
Other SMSA	97.5	2,656.5	255.3	175.9	431.2	3,087.7	3,185.2
Non-SMSA	59.5	2,069.8	189.8	118.7	308.5	2,378.3	2,437.8
TOTAL	224.7	6,233.7	609.9	391.3	1,001.2	7,234.9	7,459.6
SOUTH							
Central Cities	107.1	2,023.9	204.9	120.9	325.8	2,349.7	2,456.8
Other SMSA	58.4	1,463.9	160.9	86.1	247.0	1,710.9	1,769.3
Non-SMSA	99.5	2,690.2	269.1	140.2	409.3	3,099.5	3,199.0
TOTAL	265.0	6,178.0	634.9	347.2	982.1	7,160.1	7,425.1
WEST							
Central Cities	101.6	1,406.3	153.9	98.4	252.3	1,658.6	1,760.2
Other SMSA	125.5	1,922.3	207.9	135.8	343.7	2,266.0	2,391.5
Non-SMSA	39.0	952.2	97.1	55.7	152.8	1,105.0	1,144.0
TOTAL	266.1	4,280.8	458.9	289.9	748.8	5,029.6	5,295.7
All Central Cities	341.0	6,422.7	711.9	412.3	1,124.2	7,546.9	7,887.9
All Other SMSA	392.0	8,631.1	957.6	602.9	1,560.5	10,191.6	10,583.6
All Non-SMSA	237.5	6,808.2	657.3	380.7	1,038.0	7,846.2	8,083.7
TOTAL U. S.	970.5	21,862.0	2,326.8	1,395.9	3,722.7	25,584.7	26,555.2

PROJECTED INSTRUCTIONAL SALARY COSTS
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1980-81							
		Professionals			Total		
	Non-Profes-sionals	Classroom Teachers	Supervisory	Non-Supervisory	Non-Teaching Professionals	All Professionals	Instructional Staff
NORTHEAST							
Central Cities	67.9	1,626.5	237.5	112.8	350.3	1,976.8	2,044.7
Other SMSA	122.3	3,000.9	440.3	256.5	696.8	3,697.7	3,820.0
Non-SMSA	42.3	1,211.8	128.3	79.8	208.1	1,419.9	1,462.2
TOTAL	232.5	5,839.2	806.1	449.1	1,255.2	7,094.4	7,326.9
NORTH CENTRAL							
Central Cities	71.2	1,637.2	194.7	128.9	323.6	1,960.8	2,032.0
Other SMSA	109.1	3,076.0	323.8	251.0	574.8	3,650.8	3,759.9
Non-SMSA	60.4	2,197.1	219.6	157.1	376.7	2,573.8	2,634.2
TOTAL	240.7	6,910.3	738.1	537.0	1,275.1	8,185.4	8,426.1
SOUTH							
Central Cities	113.4	2,364.7	262.1	173.9	436.0	2,800.7	2,914.1
Other SMSA	67.3	1,835.8	221.1	131.7	352.8	2,188.6	2,255.9
Non-SMSA	97.9	2,936.1	321.8	188.1	509.9	3,446.0	3,543.9
TOTAL	278.6	7,136.6	805.0	493.7	1,298.7	8,435.3	8,713.9
WEST							
Central Cities	110.4	1,588.0	197.3	124.5	321.8	1,909.8	2,020.2
Other SMSA	143.7	2,276.5	282.6	182.3	464.9	2,741.4	2,885.1
Non-SMSA	39.1	999.8	116.8	65.3	182.1	1,181.9	1,221.0
TOTAL	293.2	4,864.3	596.7	372.1	968.8	5,833.1	6,126.3
All Central Cities	362.9	7,216.4	891.6	540.1	1,431.7	8,648.1	9,011.0
All Other SMSA	442.4	10,189.2	1,267.8	821.5	2,089.3	12,278.5	12,720.9
All Non-SMSA	239.7	7,344.8	786.5	490.3	1,276.8	8,621.6	8,861.3
TOTAL U. S.	1,045.0	24,750.4	2,945.9	1,851.9	4,797.8	29,548.2	30,593.2

SOURCE: See Tables 15, 16, 17 and 19

TABLE 21

INSTRUCTIONAL SALARY COSTS AND ADJUSTMENT FOR UNDER-REPORTING BY REGION AND TYPE OF DISTRICT, ESTIMATED 1967-68, PROJECTED 1975-76 AND 1980-81
(In Millions of 1967-68 Dollars)

1967-68

Region	Professional Salaries			Non-Professional Salaries	Total Instructional Salaries
	Cost	Adjustment	Expenditures		
NORTHEAST					
Central Cities	1,241.3	1.16	1,438.3	52.8	1,491.1
Other SMSA	1,738.2	1.12	1,946.4	76.7	2,023.1
Non-SMSA	715.5	1.13	808.2	26.6	834.8
TOTAL	3,695.0		4,192.9	156.1	4,349.0
NORTH CENTRAL					
Central Cities	1,326.6	1.09	1,438.9	58.9	1,497.8
Other SMSA	1,660.1	1.00	1,654.8	64.0	1,718.8
Non-SMSA	1,599.9	.99	1,590.0	47.3	1,637.3
TOTAL	4,586.6		4,683.7	170.2	4,853.9
SOUTH					
Central Cities	1,518.8	1.09	1,658.6	75.5	1,734.1
Other SMSA	925.1	1.02	943.5	40.7	984.2
Non-SMSA	1,790.9	1.00	1,789.0	65.4	1,854.4
TOTAL	4,234.8		4,391.1	181.6	4,572.7
WEST					
Central Cities	1,083.3	1.09	1,182.7	77.6	1,260.3
Other SMSA	1,208.5	1.05	1,270.1	81.6	1,351.7
Non-SMSA	828.6	.97	806.5	31.8	838.3
TOTAL	3,120.4		3,259.3	191.0	3,450.3
All Central Cities	5,170.0		5,718.5	264.8	5,983.3
All Other SMSA	5,531.9		5,814.8	263.0	6,077.8
All Non-SMSA	4,934.9		4,993.7	171.1	5,164.8
TOTAL U.S.	15,636.8		16,527.0	698.9	17,225.9

1975-76

Region	Professional Salaries			Non-Professional Salaries	Total Instructional Salaries
	Cost	Adjustment	Expenditures		
NORTHEAST					
Central Cities	1,769.7	1.16	2,052.9	64.6	2,117.5
Other SMSA	3,127.0	1.12	3,502.2	110.6	3,612.8
Non-SMSA	1,263.4	1.13	1,427.6	39.5	1,467.1
TOTAL	6,160.1		6,982.7	214.7	7,197.4
NORTH CENTRAL					
Central Cities	1,768.9	1.09	1,928.1	67.7	1,995.8
Other SMSA	3,087.7	1.00	3,087.7	97.5	3,185.2
Non-SMSA	2,378.3	.99	2,354.5	59.5	2,414.0
TOTAL	7,234.9		7,370.3	224.7	7,595.0
SOUTH					
Central Cities	2,349.7	1.09	2,561.2	107.1	2,668.3
Other SMSA	1,710.9	1.02	1,745.1	58.4	1,803.5
Non-SMSA	3,099.5	1.00	3,099.5	99.5	3,199.0
TOTAL	7,160.1		7,405.8	265.0	7,670.8
WEST					
Central Cities	1,658.6	1.09	1,807.9	101.6	1,909.5
Other SMSA	2,266.0	1.05	2,379.3	125.5	2,504.8
Non-SMSA	1,105.0	.97	1,071.9	39.0	1,110.9
TOTAL	5,029.6		5,259.1	266.1	5,525.2
All Central Cities	7,546.9		8,350.1	341.0	8,691.1
All Other SMSA	10,191.6		10,714.3	392.0	11,106.3
All Non-SMSA	7,846.2		7,953.5	237.5	8,191.0
TOTAL U.S.	25,584.7		27,017.9	970.5	27,988.4

Instructional Salary Costs and
Adjustment for Under-Reporting
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1980-81

Region	Professional Salaries			Non-Professional Salaries	Total Instructional Salaries
	Cost	Adjustment	Expenditures		
NORTHEAST					
Central Cities	1,976.8	1.16	2,293.1	67.9	2,361.0
Other SMSA	3,697.7	1.12	4,141.4	122.3	4,263.7
Non-SMSA	1,419.9	1.13	1,604.5	42.3	1,646.8
TOTAL	7,094.4		8,039.0	232.5	8,271.5
NORTH CENTRAL					
Central Cities	1,960.8	1.09	2,137.3	71.2	2,208.5
Other SMSA	3,650.8	1.00	3,650.8	109.1	3,759.9
Non-SMSA	2,573.8	.99	2,548.1	60.4	2,608.5
TOTAL	8,185.4		8,336.2	240.7	8,576.9
SOUTH					
Central Cities	2,800.7	1.09	3,052.8	113.4	3,166.2
Other SMSA	2,188.6	1.02	2,232.4	67.3	2,299.7
Non-SMSA	3,446.0	1.00	3,446.0	97.9	3,543.9
TOTAL	8,435.3		8,731.2	278.6	9,009.8
WEST					
Central Cities	1,909.8	1.09	2,081.7	110.4	2,192.1
Other SMSA	2,741.4	1.05	2,878.5	143.7	3,022.2
Non-SMSA	1,181.9	.97	1,146.4	39.1	1,185.5
TOTAL	5,833.1		6,106.6	293.2	6,399.8
All Central Cities	8,648.1		9,564.9	362.9	9,927.8
All Other SMSA	12,278.5		12,903.1	442.4	13,345.5
All Non-SMSA	8,621.6		8,745.0	239.7	8,984.7
TOTAL U.S.	29,548.2		31,213.0	1,045.0	32,258.0

Source: Adjustment of factor based on reanalysis of Elementary-Secondary General Information Survey (ELSEGIS), conducted by Office of Education 1969 and 1970; also see text and Table 20.

TABLE 22

EXPENDITURES FOR LOCAL ADMINISTRATIVE UNITS, TOTAL AND AS A PER CENT OF INSTRUCTIONAL EXPENDITURES, BY REGION, 1959-60, 1961-62, 1963-64, 1965-66, 1967-68

TOTAL EXPENDITURES
(In Thousands of Current Dollars)

	1959-60	1961-62	1963-64	1965-66	1967-68
NORTHEAST	93,724	109,811	138,091	186,037	275,525
NORTH CENTRAL	116,415	151,516	176,665	208,380	275,743
SOUTH	87,744	105,496	117,983	151,125	207,232
WEST	84,118	99,734	104,160	124,581	155,505
TOTAL U. S.	382,001	466,557	536,898	670,123	914,005

AS A PER CENT OF INSTRUCTIONAL EXPENDITURES

	1959-60	1961-62	1963-64	1965-66	1967-68
NORTHEAST	4.42	4.38	4.57	5.02	5.81
NORTH CENTRAL	4.89	5.36	5.36	5.22	5.38
SOUTH	4.07	4.03	3.86	3.94	4.25
WEST	4.96	4.83	4.39	4.29	4.27
TOTAL U.S.	4.57	4.66	4.57	4.64	4.97

Source: U.S. Department of Health, Education, and Welfare, Office of Education, Statistics of State School Systems, 1959-60, 1961-62, 1963-64, 1965-66, 1967-68 (preliminary figures), U.S. Government Printing Office, Washington, D. C.

TABLE 23

LOCAL ADMINISTRATIVE EXPENDITURES AND TOTAL INSTRUCTIONAL EXPENDITURES, BY REGION AND TYPE OF DISTRICT, 1967-68

(Expenditures in Millions of Dollars)

Region	Total Instructional	Administration	
		Expenditures	As % of Instructional Expenditures
NORTHEAST			
Central Cities	1,583.0	90.1	5.69
Other SMSA	2,227.6	128.4	5.76
Non-SMSA	929.0	57.0	6.14
TOTAL	4,739.6	275.5	5.81
NORTH CENTRAL			
Central Cities	1,592.6	67.5	4.24
Other SMSA	1,802.6	100.4	5.57
Non-SMSA	1,725.7	107.8	6.25
TOTAL	5,120.9	275.7	5.38
SOUTH			
Central Cities	1,837.4	67.3	3.66
Other SMSA	1,038.1	41.2	3.97
Non-SMSA	1,998.3	98.7	4.94
TOTAL	4,873.8	207.2	4.25
WEST			
Central Cities	1,329.1	52.6	3.96
Other SMSA	1,420.2	57.8	4.07
Non-SMSA	892.2	45.1	5.05
TOTAL	3,641.5	155.5	4.27
All Central Cities	6,342.1	277.5	4.38
All Other SMSA	6,488.5	327.8	5.05
All Non-SMSA	5,545.2	308.6	5.57
TOTAL U.S.	18,375.8	913.9	4.97

Source: Regional totals from U.S. Department of Health, Education, and Welfare, Office of Education, Statistics of State School Systems, 1967-68 (preliminary figures), U.S. Government Printing Office, Washington, D.C.; Type of district based on reanalysis of Elementary-Secondary General Information Survey (ELSEGIS), conducted by Office of Education, 1969 and 1970.

TABLE 24

OTHER INSTRUCTIONAL EXPENDITURES AND INSTRUCTIONAL SALARIES BY REGION AND TYPE OF DISTRICT, 1967-68
(In Millions of Dollars)

		Other Instructional Expenditures		
			As % of Instruct. Salaries	
Region	Instructional Salaries	Total	1967-68	Average 1965-66, 1967-68
NORTHEAST				
Central Cities	1,479.2	103.3	6.98	6.39
Other SMSA	2,005.5	221.5	11.04	10.11
Non-SMSA	828.1	102.0	12.32	11.29
TOTAL	4,312.8	426.8	9.90	9.07
NORTH CENTRAL				
Central Cities	1,466.5	125.6	8.56	8.25
Other SMSA	1,680.2	121.4	7.23	6.96
Non-SMSA	1,599.4	127.8	7.99	7.70
TOTAL	4,746.1	374.8	7.90	7.61
SOUTH				
Central Cities	1,717.0	118.0	6.87	6.95
Other SMSA	971.4	68.2	7.02	7.10
Non-SMSA	1,830.0	169.2	9.25	9.36
TOTAL	4,518.4	355.4	7.87	7.96
WEST				
Central Cities	1,249.8	80.2	6.42	6.45
Other SMSA	1,324.6	93.2	7.04	7.07
Non-SMSA	821.9	71.9	8.75	8.79
TOTAL	3,396.3	245.3	7.22	7.25
All Central Cities	5,912.5	427.1	7.22	6.99
All Other SMSA	5,981.7	504.3	8.43	8.16
All Non-SMSA	5,079.4	470.9	9.27	8.98
TOTAL U.S.	16,973.6	1,402.3	8.26	8.00

Source: Regional totals from U.S. Department of Health, Education, and Welfare, Office of Education, Statistics of State School Systems, 1967-68 (preliminary figures), U.S. Government Printing Office, Washington, D.C.; Type of district based on reanalysis of Elementary-Secondary General Information Survey (ELSEGIS), conducted by Office of Education, 1969 and 1970.

TABLE 25

TOTAL COST AND COST PER PUPIL IN CURRENT AND CONSTANT 1967-68 DOLLARS FOR SELECTED CURRENT EXPENDITURES FOR TOTAL U.S. AND BY REGION, 1949-50, 1955-56, AND BIENNIAL 1959-60 TO 1967-68
(TOTAL COST IN THOUSANDS OF DOLLARS)

OPERATIONS

	1949-50		1955-56		1959-60		1961-62	
Region	Total	Per Pupil	Total	Per Pupil	Total	Per Pupil	Total	Per Pupil
			Current Dollars					
NORTHEAST	118,651	22.87	202,803	31.90	289,508	39.33	337,151	43.36
NORTH CENTRAL	164,724	24.47	268,065	31.90	364,826	37.80	439,299	42.82
SOUTH	74,840	8.74	139,966	13.66	205,071	17.69	239,308	19.48
WEST	69,374	21.79	141,905	31.95	225,631	38.52	267,327	41.26
TOTAL U.S.	427,587	18.07	752,739	25.56	1,085,036	31.57	1,283,085	34.87
			Constant Dollars					
NORTHEAST	192,303	37.07	275,548	43.34	351,345	47.73	390,673	50.24
NORTH CENTRAL	266,976	39.66	364,219	43.34	442,750	45.87	509,037	49.62
SOUTH	121,297	14.17	190,171	18.56	248,873	21.47	277,298	22.57
WEST	112,438	35.32	192,806	43.41	273,824	46.75	309,764	47.81
TOTAL U.S.	693,010	29.29	1,022,743	34.73	1,316,791	38.31	1,486,773	40.41

Cost for Selected Current Expenditures
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OPERATIONS

Region	1963-64 Total	1963-64 Per Pupil	1965-66 Total	1965-66 Per Pupil	1967-68 Total	1967-68 Per Pupil
			Current Dollars			
NORTHEAST	384,703	45.83	489,594	56.02	546,551	60.07
NORTH CENTRAL	488,796	44.00	593,774	51.19	696,330	57.14
SOUTH	279,398	21.35	337,588	25.12	426,314	30.52
WEST	292,949	41.39	341,789	45.10	405,443	50.89
TOTAL U.S.	1,445,846	36.45	1,762,745	42.62	2,074,638	48.00
			Constant Dollars			
NORTHEAST	433,224	51.61	525,880	60.17	546,551	60.07
NORTH CENTRAL	550,446	49.55	637,781	54.98	696,330	57.14
SOUTH	314,637	24.04	362,608	26.98	426,314	30.52
WEST	329,898	46.61	367,120	48.44	405,443	50.89
TOTAL U.S.	1,628,205	41.05	1,893,389	45.78	2,074,638	48.00

Cost for Selected Current Expenditures
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MAINTENANCE

Region	1949-50 Total	1949-50 Per Pupil	1955-56 Total	1955-56 Per Pupil	1959-60 Total	1959-60 Per Pupil	1961-62 Total	1961-62 Per Pupil
				Current Dollars				
NORTHEAST	58,348	11.25	80,541	12.67	100,194	13.61	117,714	15.14
NORTH CENTRAL	71,211	10.58	102,731	12.22	123,314	12 78	135,469	13.21
SOUTH	48,702	5.69	75,515	7.37	101,849	8.79	112,412	9.15
WEST	35,903	11.28	60,772	13.68	97,230	16.60	111,751	17.25
TOTAL U.S.	214,164	9.05	319,559	10.85	422,587	12.30	477,346	12.97
				Constant Dollars				
NORTHEAST	105,512	20.34	119,320	18.77	129,785	17.63	143,554	18.46
NORTH CENTRAL	128,772	19.13	152,194	18.10	159,733	16.55	165,206	16.11
SOUTH	88,069	10.29	111,874	10.92	131,929	11.39	137,088	11.16
WEST	64,924	20.40	90,033	20.27	125,946	21.50	136,281	21.04
TOTAL U.S.	387,277	16.37	473,421	16.07	547,392	15.93	582,129	15.82

Cost for Selected Current Expenditures
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MAINTENANCE

Region	1963-64 Total	1963-64 Per Pupil	1965-66 Total	1965-66 Per Pupil	1967-68 Total	1967-68 Per Pupil
			Current Dollars			
NORTHEAST	130,854	15.59	123,038	14.08	187,717	20.63
NORTH CENTRAL	153,269	13.80	165,889	15.08	214,675	17.61
SOUTH	130,292	9.96	184,640	13.74	209,825	15.02
WEST	124,771	17.63	150,014	19.80	177,543	22.29
TOTAL U.S.	539,186	13.59	623,581	15.08	789,760	18.27
			Constant Dollars			
NORTHEAST	150,580	17.94	132,727	15.19	187,717	20.63
NORTH CENTRAL	176,374	15.88	178,953	16.27	214,675	17.61
SOUTH	149,933	11.46	199,180	14.82	209,825	15.02
WEST	143,580	20.29	161,827	21.36	177,543	22.29
TOTAL U.S.	620,467	15.64	672,687	16.27	789,760	18.27

ATTENDANCE

Region	1949-50 Total	1949-50 Per Pupil	1955-56 Total	1955-56 Per Pupil	1959-60 Total	1959-60 Per Pupil	1961-62 Total	1961-62 Per Pupil
Current Dollars								
NORTHEAST	N.A.	N.A.	7,571	1.41	9,418	1.50	11,269	1.66
NORTH CENTRAL	N.A.	N.A.	1,424	.57	3,777	.62	6,474	.75
SOUTH	N.A.	N.A.	5,519	.65	7,534	.73	9,209	.75
WEST	N.A.	N.A.	5,049	1.63	7,544	1.46	9,008	1.43
TOTAL U.S.	N.A.	N.A.	19,563	1.00	28,273	1.02	35,960	1.06
Constant Dollars								
NORTHEAST	N.A.	N.A.	13,520	2.52	13,512	2.15	15,167	2.23
NORTH CENTRAL	N.A.	N.A.	2,543	1.02	5,419	.89	8,713	1.01
SOUTH	N.A.	N.A.	9.855	1.16	10,809	1.05	12,394	1.01
WEST	N.A.	N.A.	9,016	2.91	10,824	2.09	12,124	1.92
TOTAL U.S.	N.A.	N.A.	34,934	1.79	40,564	1.46	48,398	1.43

N.A. - Not Available

ATTENDANCE

Region	1963-64 Total	1963-64 Per Pupil	1965-66 Total	1965-66 Per Pupil	1967-68 Total	1967-68 Per Pupil
Current Dollars						
NORTHEAST	15,314	1.82	16,765	1.92	22,145	2.43
NORTH CENTRAL	9,500	.92	12,845	1.11	17,751	1.46
SOUTH	11,500	.87	15,333	1.14	25,006	1.79
WEST	8,225	1.19	9,602	1.31	13,113	1.64
TOTAL U:S.	44,539	1.15	54,545	1.33	78,015	1.80
Constant Dollars						
NORTHEAST	18,953	2.25	19,182	2.20	22,145	2.43
NORTH CENTRAL	11,757	1.14	14,697	1.27	17,751	1.46
SOUTH	14,233	1.08	17,543	1.30	25,006	1.79
WEST	10,179	1.47	10,986	1.50	13,113	1.64
TOTAL U.S.	55,123	1.42	62,408	1.52	78,015	1.80

HEALTH

Region	1949-50 Total	1949-50 Per Pupil	1955-56 Total	1955-56 Per Pupil	1959-60 Total	1959-60 Per Pupil	1961-62 Total	1961-62 Per Pupil
Current Dollars								
NORTHEAST	18,432	3.55	36,215	5.70	45,636	6.20	65,950	8.48
NORTH CENTRAL	5,800	1.14	9,858	1.35	17,396	2.04	19,150	2.01
SOUTH	4,927	.75	6,783	.80	8,577	.84	11,013	.97
WEST	1,440	1.04	15,873	3.67	29,060	5.08	32,518	5.02
TOTAL U.S.	30,599	1.68	68,729	2.60	100,669	3.17	128,631	3.66
Constant Dollars								
NORTHEAST	45,511	8.77	64,670	10.18	65,475	8.90	88,762	11.41
NORTH CENTRAL	14,321	2.81	17,604	2.41	24,958	2.93	25,774	2.70
SOUTH	12,165	1.85	12,113	1.43	12,306	1.21	14,822	1.31
WEST	3,555	2.57	28,345	6.55	41,693	7.29	43,766	6.76
TOTAL U.S.	75,553	4.15	122,730	4.64	144,432	4.55	173,124	4.93

Cost for Selected Current Expenditures
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HEALTH

Region	1963-64 Total	1963-64 Per Pupil	1965-66 Total	1965-66 Per Pupil	1967-68 Total	1967-68 Per Pupil
			Current Dollars			
NORTHEAST	63,061	7.51	72,653	8.31	94,560	10.39
NORTH CENTRAL	22,801	2.05	27,878	2.40	40,345	3.31
SOUTH	11,685	.97	20,584	1.66	29,843	2.16
WEST	22,680	3.20	28,068	3.70	32,882	4.20
TOTAL U.S.	120,227	3.11	149,183	3.70	197,630	4.60
			Constant Dollars			
NORTHEAST	78,046	9.29	83,127	9.51	94,560	10.39
NORTH CENTRAL	28,219	2.54	31,897	2.75	40,345	3.31
SOUTH	14,462	1.20	23,551	1.90	29,843	2.16
WEST	28,069	3.96	32,114	4.23	32,882	4.20
TOTAL U.S.	148,796	3.85	170,690	4.23	197,630	4.60

Source: U.S. Department of Health, Education and Welfare, Office of Education, Biennial Survey of Education, 1948-50, 1954-56, and Statistics of State School Systems, 1959-60, 1961-62, 1963-64, 1965-66, 1967-68 (preliminary), U.S. Government Printing Office, Washington, D.C.

Alaska and Hawaii not included in 1949-50 and 1955-56.

TABLE 26

PRICE INDICES FOR COMPONENTS OF COST OF SELECTED CURRENT EXPENDITURES 1949-50 TO 1967-68

Operations	1949-50	1955-56	1959-60	1961-62	1963-64	1965-66	1967-68
Salaries	.498	.648	.759	.806	.849	.906	1.000
Fuel, Light, Water, etc.	.858	.917	.947	.967	.962	.981	1.000
Supplies and Other Expenses	.568	.686	.778	.828	.882	.940	1.000
Composite Operations	.617	.736	.824	.863	.888	.931	1.000
Maintenance							
Salaries	.498	.648	.759	.806	.849	.906	1.000
Supplies and Other Expenses	.568	.686	.778	.828	.882	.940	1.000
Composite Maintenance	.553	.675	.772	.820	.869	.927	1.000
Attendance and Health	.405	.560	.697	.743	.808	.874	1.000

Source: Attendance and Health; National Education Association, Research Division, Estimates of School Statistics, 1959-60, 1963-64, 1970-71, The Association, Washington, D.C., Change in Salary of Classroom Teachers; Salaries, Fuel, etc.; U.S. Department of Labor, Bureau of Labor Statistics, Handbook of Labor Statistics, 1970, Bulletin 1666, U.S. Government Printing Office, Washington, D.C., 1970, Change in hourly earnings of workers in non-durable manufacturing, Table 100, Wholesale price indices for gas, electric and refined petroleum, Table 129, Supplies; U.S. Bureau of the Census, Statistical Abstract of the United States: 1970, U.S. Government Printing Office, Washington, D.C., 1970, Price and cost indices for construction and selected components of construction, Table 1076.

TABLE 27

PERCENT DISTRIBUTION OF COMPONENT COSTS OF SELECTED CURRENT EXPENDITURES FOR TOTAL UNITED STATES AND BY REGION, 1949-50, 1955-56 AND BIENNIAL 1959-60 TO 1967-68

	1949-50					1955-56				
Operations	United States	North-east	North Central	South	West	United States	North-east	North Central	South	West
Salaries	58.9	61.9	59.6	53.9	57.2	58.8	62.8	59.9	52.7	59.1
Fuel, Light, Water, etc.	31.2	29.9	30.8	33.1	33.1	31.5	29.9	29.8	35.6	32.9
Supplies and Other Expenses	9.9	8.2	9.6	13.0	9.7	9.6	7.3	10.3	11.7	7.9
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Maintenance										
Salaries	21.1[1]	N.A.	N.A.	N.A.	N.A.	27.7	21.7	29.5	29.0	29.6
Supplies and Other Expenses	78.9[1]	N.A.	N.A.	N.A.	N.A.	72.3	78.3	70.5	71.0	70.4
TOTAL	100.0	N.A.	N.A.	N.A.	N.A.	100.0	100.0	100.0	100.0	100.0
Attendance Services										
Salaries	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Other Expenses	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
TOTAL	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Health Services										
Salaries	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Other Expenses	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
TOTAL	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

Percent Distribution of Component Costs of Selected Current Expenditures
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	1959-60					1961-62				
	United States	North-east	North Central	South	West	United States	North-east	North Central	South	West
Operations										
Salaries	58.1	62.8	58.1	51.9	58.8	57.7	62.4	56.6	52.2	59.3
Fuel, Light, Water, etc.	33.8	28.0	35.7	38.5	33.2	34.2	30.6	35.5	37.9	32.4
Supplies and Other Expenses	8.1	9.2	6.2	9.6	7.9	8.1	7.0	7.9	9.9	8.3
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Maintenance										
Salaries	33.1	26.6	29.0	37.5	32.0	35.5	29.8	31.1	39.2	40.5
Supplies and Other Expenses	66.9	73.4	71.0	62.4	68.0	64.5	70.2	68.9	60.8	59.5
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Attendance Services										
Salaries	92.4	94.8	93.7	88.9	95.4	93.9	95.6	97.0	90.0	95.0
Other Expenses	7.6	5.1	6.3	11.1	4.7	6.1	4.4	3.0	10.0	5.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Health Services										
Salaries	91.3	94.7	91.8	77.6	86.0	80.0	77.0	91.0	78.7	88.4
Other Expenses	8.7	5.3	8.2	22.3	14.0	20.0	23.0	9.0	21.3	11.6
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Percent Distribution of Component Costs of Selected Current Expenditures
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	1963-64					1965-66				
Operations	United States	North-east	North Central	South	West	United States	North-east	North Central	South	West
Salaries	60.1	63.1	59.8	51.7	65.2	58.1	58.0	58.1	52.6	63.9
Fuel, Light, Water, etc.	32.8	28.3	32.4	39.6	32.5	27.1	25.6	30.8	37.9	13.4
Supplies and Other Expenses	7.1	8.5	7.7	8.7	2.3	14.7	16.4	11.1	9.4	22.7
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Maintenance										
Salaries	38.1	25.4	37.6	37.7	48.8	37.2	26.8	30.3	40.2	46.2
Supplies and Other Expenses	61.9	74.6	62.4	62.3	51.2	62.8	73.2	69.7	59.8	53.8
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Attendance Services										
Salaries	93.2	95.9	94.0	91.3	92.6	93.8	95.9	94.0	91.3	92.6
Other Expenses	6.8	4.2	6.0	8.7	7.4	6.2	4.0	6.0	8.7	7.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Health Services										
Salaries	91.0	94.0	89.5	81.7	82.3	84.2	90.0	81.4	64.1	82.4
Other Expenses	9.0	6.0	10.5	18.3	17.6	15.8	9.1	18.6	35.8	17.6
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Percent Distribution of Component Costs of Selected Current Expenditures
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	1967-68				
Operations	United States	North-east	North Central	South	West
Salaries	57.5	56.4	56.6	54.2	63.9
Fuel, Light, Water, etc.	27.1	26.7	30.0	36.7	13.5
Supplies and Other Expenses	15.4	16.9	13.4	9.0	22.7
TOTAL	100.0	100.0	100.0	100.0	100.0
Maintenance					
Salaries	41.4	45.2	31.0	42.0	48.9
Supplies and Other Expenses	58.6	54.8	68.9	58.0	51.1
TOTAL	100.0	100.0	100.0	100.0	100.0
Attendance Services					
Salaries	93.3	95.0	94.1	90.4	95.7
Other Expenses	6.7	5.0	5.9	9.5	4.3
TOTAL	100.0	100.0	100.0	100.0	100.0
Health Services					
Salaries	85.5	90.7	84.4	71.1	81.5
Other Expenses	14.5	9.3	15.6	28.9	18.5
TOTAL	100.0	100.0	100.0	100.0	100.0

1 Estimated from 1955-56 to 1965-66 growth rate.

N.A. Not available.

N.B. Percentages may not add to 100.0% because of rounding.

Source: U.S. Department of Health, Education and Welfare, Office of Education, Biennial Survey of Education, 1948-50, 1954-56, and Statistics of State School Systems, 1959-60, 1961-62, 1963-64, 1965-66, 1967-68 (preliminary), U.S. Government Printing Office, Washington, D. C.

Alaska and Hawaii not included in 1949-50 and 1955-56.

TABLE 28

FACTORS FOR ADJUSTING 1967-68 DOLLARS BASED ON CHANGES 1949-50 TO 1967-68

	Increase Relative to CPI	Increase in Cost per Pupil	Total Increase	Projected Growth
	%	%	%	%
Operations	0.6	2.8	3.4	2.8
Maintenance	1.2	0.7	1.9	1.6
Attendance	3.0	0.1[a]	3.1	[b]
Health	3.0	0.5	3.5	[b]
Transportation	- 0.1	2.2[c]	2.1	0.0

[a] 1956 to 1966

[b] See Teacher Salary Projections

[c] Cost per pupil transported 1959-60 to 1967-68

Source: Change in Consumer Price Index calculated from U.S. Department of Labor, Bureau of Labor Statistics, Handbook of Labor Statistics 1970, Bulletin 1666, U.S. Government Printing Office, Washington, D. C., table 123; see also Tables 25 and 33.

TABLE 29

COST PER SQUARE FOOT FOR OPERATION OF COMMERCIAL OFFICE BUILDINGS, FOR TOTAL U.S. AND BY REGION, 1967, 1968 AND 1969

(Current Dollars)

Region	1967	1968	1969
NORTHEAST	1.86	2.04	1.94
NORTH CENTRAL	1.72	1.84	1.91
SOUTH	1.44	1.51	1.55
WEST	1.54	1.60	1.72
U.S. TOTAL	1.69	1.79	1.82

Source: Building Owners and Managers Association, International Office, Office Building Experiences Exchange Report Annual Reports 1967, 1968, 1969, Chicago.

TABLE 30

COMPARISON OF PERCENT DISTRIBUTION OF COMPONENT COSTS FOR OPERATING COMMERCIAL OFFICE AND SCHOOL BUILDINGS FOR TOTAL U.S. AND BY REGION, 1967

Operations	Northeast		North Central		South		West	
	Commercial	School	Commercial	School	Commercial	School	Commercial	School
Wages and Salaries	61.5	56.4	63.6	56.6	54.5	54.2	65.0	63.9
Fuel, Light, Water, etc.	29.0	26.7	24.0	30.0	29.8	36.7	20.1	13.5
Supplies and Other Expenses	9.5	16.9	12.4	13.4	15.7	9.0	15.0	22.7
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Schools, U.S. Department of Health, Education and Welfare, Office of Education, Statistics of State School Systems 1967-68 (prelim. figures). Commercial, Building Owners and Managers Association, International Office, Office Building Experiences Exchange Report, Annual Report 1967, Chicago.

TABLE 31

PROJECTED AVERAGE ANNUAL PERCENTAGE INCREASE IN SELECTED CURRENT EXPENDITURES, BY REGION

	Operations	Maintenance
NORTHEAST	2.8%	1.5%
NORTH CENTRAL	2.5	1.3
SOUTH	3.7	2.1
WEST	2.5	1.6
U. S.	2.8	1.6

Source: Regional differences based on relative increases in cost per pupil in constant dollars 1949-50 to 1967-68. See Table 25.

TABLE 32

TOTAL COSTS AND COSTS PER PUPIL OF SELECTED CURRENT EXPENDITURES BY REGION AND TYPE OF DISTRICT, ESTIMATED 1967-68, PROJECTED 1975-76 AND 1980-81 IN ADJUSTED 1967-68 DOLLARS

TOTAL COSTS 1967-68
(Millions of Dollars)

Region	Operations	Maintenance	Attendance	Health
NORTHEAST				
Central Cities	168.3	58.6	14.4	26.4
Other SMSA	268.4	93.8	5.8	48.5
Non-SMSA	109.9	35.3	1.9	19.7
TOTAL	546.6	187.7	22.1	94.6
NORTH CENTRAL				
Central Cities	215.9	76.7	12.5	16.8
Other SMSA	256.9	70.2	3.1	13.1
Non-SMSA	223.5	67.8	2.2	10.4
TOTAL	696.3	214.7	17.8	40.3
SOUTH				
Central Cities	165.2	82.4	8.8	12.1
Other SMSA	103.9	50.4	6.6	5.7
Non-SMSA	157.2	77.0	9.7	12.0
TOTAL	426.3	209.8	25.1	29.8
WEST				
Central Cities	138.4	73.9	8.5	14.7
Other SMSA	163.5	66.8	2.6	13.7
Non-SMSA	103.5	36.8	2.0	4.5
TOTAL	405.4	177.5	13.1	32.9
All Central Cities	687.8	291.6	44.2	70.0
All Other SMSA	792.7	281.2	18.1	81.0
All Non-SMSA	594.1	216.9	15.8	46.6
TOTAL U.S.	2,074.6	789.7	78.1	197.6

TOTAL COSTS 1975-76
(In Millions of Adjusted 1967-68 Dollars)

Region	Operations	Maintenance	Attendance	Health
NORTHEAST				
Central Cities	201.5	63.4	17.3	30.8
Other SMSA	404.2	127.6	8.8	71.1
Non-SMSA	160.3	46.5	2.8	28.0
TOTAL	766.0	237.5	28.9	129.9
NORTH CENTRAL				
Central Cities	236.7	76.5	14.3	18.6
Other SMSA	387.5	96.3	4.9	20.0
Non-SMSA	272.3	75.2	2.8	12.8
TOTAL	896.5	248.0	22.0	51.4
SOUTH				
Central Cities	215.0	94.6	11.6	15.3
Other SMSA	161.8	69.3	10.4	8.7
Non-SMSA	229.6	99.3	14.2	17.1
TOTAL	606.4	263.2	36.2	41.1
WEST				
Central Cities	180.7	89.9	11.1	18.7
Other SMSA	255.3	97.2	4.1	20.8
Non-SMSA	114.7	38.0	2.2	4.9
TOTAL	550.7	225.1	17.4	44.4
All Central Cities	833.9	324.4	54.3	83.4
All Other SMSA	1,208.8	390.4	28.2	120.6
All Non-SMSA	776.9	259.0	22.0	62.8
TOTAL U.S.	2,819.6	973.8	104.5	266.8

TOTAL COSTS 1980-81
(In Millions of Adjusted 1967-68 Dollars)

Region	Operations	Maintenance	Attendance	Health
NORTHEAST				
Central Cities	227.3	67.1	18.2	32.3
Other SMSA	480.1	142.2	9.7	78.6
Non-SMSA	182.9	49.8	3.0	29.7
TOTAL	890.3	259.1	30.9	140.6
NORTH CENTRAL				
Central Cities	260.8	79.5	15.1	19.6
Other SMSA	452.8	106.1	5.4	22.3
Non-SMSA	290.0	75.5	2.9	13.1
TOTAL	1,003.6	261.1	23.4	55.0
SOUTH				
Central Cities	255.3	104.0	12.8	17.0
Other SMSA	208.3	82.5	12.5	10.4
Non-SMSA	253.1	101.3	14.7	17.6
TOTAL	716.7	287.8	40.0	45.0
WEST				
Central Cities	210.7	100.3	12.1	20.3
Other SMSA	314.5	114.6	4.6	23.9
Non-SMSA	123.8	39.3	2.2	4.9
TOTAL	649.0	254.2	18.9	49.1
All Central Cities	954.1	350.9	58.2	89.2
All Other SMSA	1,455.7	445.4	32.2	135.2
All Non-SMSA	849.8	265.9	22.8	65.3
TOTAL U.S.	3,259.6	1,062.2	113.2	289.7

COSTS PER PUPIL 1967-68
(in Dollars)

Region	Operations	Maintenance	Attendance	Health
NORTHEAST				
Central Cities	56.29	19.60	4.82	8.83
Other SMSA	62.06	21.69	1.34	11.21
Non-SMSA	52.58	16.89	0.91	9.43
TOTAL	58.12	19.96	2.35	10.06
NORTH CENTRAL				
Central Cities	59.26	21.05	3.43	4.61
Other SMSA	57.54	15.72	0.69	2.93
Non-SMSA	50.29	15.26	0.50	2.34
TOTAL	55.47	17.10	1.42	3.21
SOUTH				
Central Cities	32.39	16.15	1.73	2.37
Other SMSA	35.84	17.39	2.28	1.97
Non-SMSA	24.84	12.17	1.53	1.90
TOTAL	29.75	14.64	1.75	2.08
WEST				
Central Cities	49.36	26.36	3.03	5.24
Other SMSA	51.06	20.86	0.81	4.28
Non-SMSA	47.96	17.05	0.93	2.09
TOTAL	49.66	21.74	1.60	4.03
All Central Cities	47.31	20.06	3.04	4.81
All Other SMSA	53.23	18.88	1.22	5.44
All Non-SMSA	39.55	14.44	1.05	3.10
TOTAL U.S.	46.67	17.77	1.76	4.45

COST PER PUPIL 1975-76
(In Adjusted 1967-68 Dollars)

Region	Operations	Maintenance	Attendance	Health
NORTHEAST				
Central Cities	70.20	22.08	6.04	10.72
Other SMSA	77.40	24.43	1.68	13.61
Non-SMSA	65.58	19.03	1.14	11.45
TOTAL	72.70	22.54	2.74	12.33
NORTH CENTRAL				
Central Cities	72.20	23.34	4.37	5.68
Other SMSA	70.11	17.43	0.88	3.61
Non-SMSA	61.27	16.92	0.64	2.89
TOTAL	67.66	18.72	1.66	3.88
SOUTH				
Central Cities	43.32	19.07	2.33	3.09
Other SMSA	47.93	20.54	3.07	2.57
Non-SMSA	33.22	14.37	2.06	2.48
TOTAL	39.77	17.26	2.37	2.70
WEST				
Central Cities	60.14	29.93	3.71	6.21
Other SMSA	62.21	23.68	0.99	5.08
Non-SMSA	58.43	19.36	1.14	2.48
TOTAL	60.71	24.82	1.92	4.89
All Central Cities	59.08	22.98	3.85	5.91
All Other SMSA	66.31	21.42	1.55	6.62
All Non-SMSA	49.29	16.43	1.40	3.98
TOTAL U.S.	58.61	20.24	2.17	5.55

Costs of Selected Current Expenditures
by Region and Type of District
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COST PER PUPIL 1980-81
(In Adjusted 1967-68 Dollars)

Region	Operations	Maintenance	Attendance	Health
NORTHEAST				
Central Cities	80.60	23.78	6.46	11.46
Other SMSA	88.86	26.32	1.80	14.55
Non-SMSA	75.29	20.50	1.22	12.24
TOTAL	83.58	24.32	2.90	13.20
NORTH CENTRAL				
Central Cities	81.69	24.90	4.72	6.15
Other SMSA	79.32	18.59	0.95	3.91
Non-SMSA	69.32	18.05	0.69	3.12
TOTAL	76.69	19.95	1.79	4.20
SOUTH				
Central Cities	51.94	21.16	2.61	3.46
Other SMSA	57.48	22.78	3.44	2.88
Non-SMSA	39.84	15.95	2.31	2.77
TOTAL	48.13	19.33	2.69	3.02
WEST				
Central Cities	68.04	32.40	3.91	6.54
Other SMSA	70.39	25.64	1.04	5.35
Non-SMSA	66.11	20.96	1.20	2.61
TOTAL	68.76	26.93	2.00	5.20
All Central Cities	68.03	25.02	4.15	6.36
All Other SMSA	75.81	23.19	1.68	7.04
All Non-SMSA	57.26	17.92	1.54	4.40
TOTAL U.S.	67.81	22.10	2.36	6.03

Source: Regional costs 1967-68 based on U.S. Department of Health, Education, and Welfare, Office of Education, Statistics of State School Systems, 1967-68 (preliminary figures); Costs for type of district based on reanalysis of Elementary-Secondary General Information Survey (ELSEGIS) conducted by U.S. Office of Education, 1969 and 1970; Projections based on increase in index of costs for each expenditure. See also Tables 5, 28 and 31.

TABLE 33

EXPENDITURES PER PUPIL FOR TRANSPORTATION SERVICES IN CURRENT AND CONSTANT 1967-68 DOLLARS FOR TOTAL U.S. AND BY REGION, 1949-50, 1955-56, AND BIENNIAL 1959-60 TO 1967-68 (TOTAL COST IN THOUSANDS OF DOLLARS)

TRANSPORTATION

	1949-50*		1955-56*		1959-60		1961-62	
Region	Total	Per Pupil	Total	Per Pupil	Total	Per Pupil	Total	Per Pupil
			Current Dollars					
NORTHEAST	40,355	7.78	74,931	11.79	111,722	15.18	133,103	17.12
NORTH CENTRAL	70,699	10.50	112,990	13.44	151,432	15.69	189,381	18.46
SOUTH	73,720	8.61	112,406	10.97	147,704	12.74	165,034	13.44
WEST	30,009	9.42	53,646	12.08	75,479	12.89	88,843	13.71
TOTAL U.S.	214,783	9.08	353,973	12.02	486,337	14.15	576,361	15.66
			Constant Dollars					
NORTHEAST	59,697	11.51	97,313	15.31	132,686	18.03	150,399	19.34
NORTH CENTRAL	104,584	15.53	146,740	17.45	179,848	18.63	213,990	20.86
SOUTH	109,053	12.74	145,982	14.25	175,420	15.13	186,479	15.19
WEST	44,392	13.93	69,670	15.69	89,643	15.31	100,388	15.49
TOTAL U.S.	317,726	13.43	459,705	15.61	577,597	16.81	651,255	17.69

* Alaska and Hawaii not included in 1949-50 and 1955-56

Expenditure Per Pupil For Transportation Services
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TRANSPORTATION

Region	1963-64		1965-66		1967-68	
	Total	Per Pupil	Total	Per Pupil	Total	Per Pupil
			Current Dollars			
NORTHEAST	181,106	21.57	229,236	26.23	303,540	33.36
NORTH CENTRAL	210,529	18.95	239,282	20.63	293,581	24.09
SOUTH	182,237	13.93	194,389	14.46	245,380	17.57
WEST	99,973	14.12	111,376	14.70	138,505	17.32
TOTAL U.S.	673,845	16.99	774,283	18.72	981,006	22.68
			Constant Dollars			
NORTHEAST	202,127	24.07	245,961	28.14	303,540	33.36
NORTH CENTRAL	234,965	21.15	256,740	22.14	293,581	24.09
SOUTH	203,390	15.55	208,572	15.52	245,380	17.57
WEST	111,577	15.76	119,502	15.77	138,505	17.32
TOTAL U.S.	752,059	18.96	830,776	20.09	981,006	22.68

Source: U.S. Department of Health, Education and Welfare, Office of Education, Biennial Survey of Education, 1948-50, 1954-56 and Statistics of State School Systems, 1959-60, 1961-62, 1963-64, 1965-66, 1967-68 (prelim. figures), U.S. Government Printing Office, Washington, D.C.

TABLE 34

PUPIL TRANSPORTATION SERVICES - COST PER PUPIL TRANSPORTED BY REGION, 1959-60 TO 1967-68 (BIENNIAL)
(In Constant Dollars)

	1959-60	1961-62	1963-64	1965-66	1967-68
NORTHEAST	48.90	50.07	58.97	64.41	69.72
NORTH CENTRAL	53.55	58.11	56.10	56.32	56.41
SOUTH	33.28	33.69	35.17	34.59	38.71
WEST	54.62	55.18	56.43	57.20	60.09
TOTAL U. S.	44.49	46.38	48.91	50.36	53.89

Source: U.S. Department of Health, Education, and Welfare, Office of Education, Statistics of State School Systems, 1959-60, 1961-62, 1963-64, 1965-66, 1967-68 (preliminary figures), U.S. Government Printing Office, Washington, D. C.; also see Table 33.

TABLE 35

PERCENT DISTRIBUTION OF COMPONENT COSTS OF PUPIL TRANSPORTATION SERVICES FOR TOTAL U.S. AND BY REGION, 1949-50, 1955-56, AND BIENNIAL 1959-60 TO 1967-68

	1949-50					1955-56				
Transportation	United States	North-east	North Central	South	West	United States	North-east	North Central	South	West
Salaries	N.A.	N.A.	N.A.	N.A.	N.A.	48.3	24.7	42.3	55.3	53.2
Replacement of Vehicles	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Operation and Maintenance of Garage	77.4[1]	43.2[1]	80.0[1]	82.5[1]	75.7[1]	N.A.	N.A.	N.A.	N.A.	N.A.
Transportation Insurance	N.A.[2]	N.A.[2]	N.A.[2]	N.A.[2]	N.A.[2]	N.A.	N.A.	N.A.	N.A.	N.A.
Other Expenses	22.6	56.8	20.0	17.5	24.3	51.7[3]	75.3[3]	57.7[3]	44.7[3]	46.8[3]
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Percent Distribution of Component Costs of Pupil Transportation
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Transportation	1959-60 United States	1959-60 North-east	1959-60 North Central	1959-60 South	1959-60 West	1961-62 United States	1961-62 North-east	1961-62 North Central	1961-62 South	1961-62 West
Salaries	40.8	13.1	46.3	46.9	39.0	33.9	13.0	27.7	48.1	35.1
Replacement of Vehicles	N.A.	N.A.	N.A.	N.A.	N.A.	10.6	1.6	13.8	11.7	9.5
Operation and Maintenance of Garage	26.0	10.3	23.9	34.4	25.2	20.1	9.8	20.6	23.0	23.6
Transportation Insurance	1.0	0.4	0.9	1.3	1.4	1.1	0.5	1.2	1.3	1.1
Other Expenses	32.2	76.2	28.9	17.3	34.5	34.2	75.3	36.7	15.9	30.8
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Percent Distribution of Component Costs of Pupil Transportation
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Transportation	1963-64 United States	1963-64 North-east	1963-64 North Central	1963-64 South	1963-64 West	1965-66 United States	1965-66 North-east	1965-66 North Central	1965-66 South	1965-66 West
Salaries	37.7	14.6	31.8	48.9	46.1	34.9	19.6	31.5	48.8	46.4
Replacement of Vehicles	9.4	3.5	12.2	12.8	3.7	8.2	3.4	11.0	12.8	4.8
Operation and Maintenance of Garage	15.8	7.1	14.8	23.9	8.6	15.4	9.6	15.3	24.4	11.2
Transportation Insurance	1.1	0.5	1.3	1.4	0.9	1.0	0.2	1.4	1.5	1.1
Other Expenses	36.0	74.4	39.9	13.0	40.6	40.4	67.2	40.9	12.5	36.5
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Percent Distribution of Component Costs of Pupil Transportation
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Transportation	1967-68 United States	 North-east	 North Central	 South	 West
Salaries	38.0	19.4	38.1	54.4	49.8
Replacement of Vehicles	7.5	3.8	8.7	12.3	4.7
Operation and Maintenance of Garage	13.1	9.4	13.2	20.1	8.7
Transportation Insurance	1.0	0.3	1.2	1.5	1.0
Other Expenses	40.3	67.0	38.8	11.7	35.8
TOTAL	100.0	100.0	100.0	100.0	100.0

1 Includes Transportation Insurance

2 Included in Operation & Maintenance of Garage

3 Includes Operation & Maintenance of Garage, and Transportation Insurance

Source: U.S. Department of Health, Education and Welfare, Office of Education, *Biennial Survey of Education*, 1948-50, 1954-56 and *Statistics of State School Systems*, 1959-60, 1961-62, 1963-64, 1965-66, 1967-68 (prelim. figures), U.S. Government Printing Office, Washington, D.C.

TABLE 36

PRICE INDICES FOR COMPONENTS OF COST OF PUPIL TRANSPORTATION SERVICES 1949-50 TO 1967-68

Transportation	1949-50	1955-56	1959-60	1961-62	1963-64	1965-66	1967-68
Salaries	.498	.648	.759	.806	.849	.906	1.000
Replacement of Vehicles	.773	.908	1.019	1.003	.990	.982	1.000
Operation and Maintenance of Garage	.745	.875	.982	.973	.967	.972	1.000
Transportation Insurance	.344[1]	N.A.	.600[1]	.660	.752	.880	1.000
Other Expenses	N.A.	N.A.	.842	.886	.896	.934	1.000
Composite Transportation	.676[1]	.770[1]	.842	.885	.896	.932	1.000

[1] Estimated on basis of change in later years.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Handbook of Labor Statistics, 1970, Bulletin 1666, U.S. Government Printing Office, Washington, D.C.; Wages in non-durable manufacturing industries, wholesale prices of motor vehicles and motor vehicles and replacement; Insurance based on cost of transportation insurance per publicly owned vehicle as reported in U.S. Department of Health, Education and Welfare, Office of Education. Biennial Survey of Education, 1948-50, 1954-56; and Statistical of State School Systems, 1961-62, 1963-64, 1965-66, 1967-68 (preliminary), U.S. Government Printing Office, Washington, D. C.

TABLE 37

EXPENDITURES FOR PUPIL TRANSPORTATION SERVICES BY REGION AND TYPE OF DISTRICT, ESTIMATED 1967-68 AND PROJECTED 1975-76 AND 1980-81

(Total Expenditures in Millions of Dollars)

1967-68

Region	Expenditures Per Pupil Transported	Expenditures Total	Pupils Transported Per Cent of Total	Pupils Transported Number (000's)
NORTHEAST				
Central Cities	108.00	79.3	24.5	734
Other SMSA	67.50	133.7	45.8	1,981
Non-SMSA	50.81	90.5	85.2	1,781
TOTAL	67.50	303.5	47.8	4,496
NORTH CENTRAL				
Central Cities	65.74	26.0	10.9	396
Other SMSA	54.78	110.3	45.1	2,014
Non-SMSA	53.32	157.3	66.4	2,950
TOTAL	54.78	293.6	42.7	5,360
SOUTH				
Central Cities	33.95	29.6	17.1	872
Other SMSA	37.72	47.5	43.4	1,259
Non-SMSA	38.48	168.3	69.1	4,374
TOTAL	37.72	245.4	45.4	6,505
WEST				
Central Cities	53.02	23.4	15.7	441
Other SMSA	58.91	49.3	26.1	837
Non-SMSA	61.32	65.8	49.7	1,073
TOTAL	58.91	138.5	28.8	2,351
All Central Cities	64.80	158.3	16.8	2,443
All Other SMSA	55.95	340.8	40.9	6,091
All Non-SMSA	47.35	481.9	67.8	10,178
TOTAL U.S.	52.43	981.0	42.1	18,712

1975-76

	Expenditures		Pupils Transported	
Region	Per Pupil Transported	Total	Per Cent of Total	Number (000's)
NORTHEAST				
Central Cities	108.00	87.4	28.2	809
Other SMSA	67.50	193.5	54.9	2,867
Non-SMSA	50.81	111.9	90.1	2,202
TOTAL	66.83	392.8	55.8	5,878
NORTH CENTRAL				
Central Cities	65.74	33.9	15.7	515
Other SMSA	54.78	163.8	54.1	2,990
Non-SMSA	53.32	166.4	70.2	3,120
TOTAL	54.96	364.1	50.0	6,625
SOUTH				
Central Cities	33.95	41.6	24.7	1,226
Other SMSA	37.72	66.8	52.5	1,772
Non-SMSA	38.48	194.4	73.1	5.052
TOTAL	37.61	302.8	52.8	8,050
WEST				
Central Cities	53.02	36.2	22.7	682
Other SMSA	58.91	75.2	31.1	1,276
Non-SMSA	61.32	71.7	59.6	1,170
TOTAL	58.54	183.1	34.5	3,128
All Central Cities	61.60	199.1	22.9	3,232
All Other SMSA	56.07	499.3	48.9	8,905
All Non-SMSA	47.16	544.4	73.2	11,544
TOTAL U.S.	52.48	1,242.8	49.2	23,681

1980-81

Region	Expenditures		Pupils Transported	
	Per Pupil Transported	Total	Per Cent of Total	Number (000's)
NORTHEAST				
Central Cities	108.00	93.9	30.8	869
Other SMSA	67.50	211.9	58.1	3,139
Non-SMSA	50.81	117.6	95.3	2,315
TOTAL	66.96	423.4	59.4	6,323
NORTH CENTRAL				
Central Cities	65.74	47.7	22.7	725
Other SMSA	54.78	175.1	56.0	3,197
Non-SMSA	53.32	162.2	72.7	3,042
TOTAL	55.28	385.0	53.2	6,964
SOUTH				
Central Cities	33.95	47.6	28.5	1,401
Other SMSA	37.72	74.3	54.4	1,971
Non-SMSA	38.48	185.1	75.7	4,810
TOTAL	37.52	307.0	54.9	8,182
WEST				
Central Cities	53.02	43.0	26.2	811
Other SMSA	58.91	91.6	34.8	1,555
Non-SMSA	61.32	70.9	61.7	1,156
TOTAL	58.35	205.5	37.3	3,522
All Central Cities	61.01	232.2	27.1	3,806
All Other SMSA	56.06	552.9	51.4	9,862
All Non-SMSA	47.32	535.8	76.3	11,323
TOTAL U.S.	52.86	1,320.9	52.0	24,991

Source: Regional totals of expenditures and per cent of total pupils transported from U.S. Department of Health, Education, and Welfare, Office of Education, Statistics of State School Systems, 1967-68, (preliminary figures), U.S. Government Printing Office, Washington, D.C.; Type of district based on reanalysis of Elementary-Secondary General Information Survey (ELSEGIS), conducted by Office of Education, 1969 and 1970; also see text.

TABLE 38

SALARY COSTS AS A PER CENT OF TOTAL EXPENDITURES FOR SELECTED CURRENT EXPENDITURES, BY REGION, 1967-68

	Northeast	North Central	South	West
Operations	56.4	56.6	54.2	63.9
Maintenance	45.2	31.0	42.0	48.9
Attendance	95.0	94.1	90.4	95.7
Health	90.7	84.4	71.1	81.5
Transportation	19.4	38.1	54.4	49.4
Administration	72.5	79.2	77.7	83.8

Source: See Tables 27 and 35.

TABLE 39

EXPENDITURES BY LOCAL SCHOOL BOARDS FOR RETIREMENT FUNDS BY REGION AND TYPE OF DISTRICT, 1967-68

(In Millions of Dollars)

Region	Retirement Fund Payments	Retirement Fund As % of Salaries	Total Salaries
NORTHEAST			
Central Cities	198.7	11.47	1,732.4
Other SMSA	219.5	9.20	2,385.8
Non-SMSA	87.0	8.63	1,008.0
TOTAL	505.2	9.86	5,126.2
NORTH CENTRAL			
Central Cities	92.9	5.34	1,740.3
Other SMSA	74.1	3.66	2,027.1
Non-SMSA	49.5	2.56	1,934.9
TOTAL	216.5	3.80	5,702.3
SOUTH			
Central Cities	50.3	2.59	1,940.1
Other SMSA	28.8	2.55	1,129.7
Non-SMSA	52.3	2.42	2,159.4
TOTAL	131.4	2.51	5,229.2
WEST			
Central Cities	74.2	5.09	1,458.7
Other SMSA	69.6	4.42	1,574.2
Non-SMSA	45.6	4.58	995.5
TOTAL	189.4	4.70	4,028.4
All Central Cities	416.1	6.06	6,871.5
All Other SMSA	392.0	5.51	7,116.8
All Non-SMSA	234.4	3.84	6,097.8
TOTAL U.S.	1,042.5	5.19	20,086.1

Source: Regional totals from U.S. Department of Health, Education and Welfare, Office of Education, Statistics of State School Systems 1967-68 (preliminary figures), U.S. Government Printing Office, Washington, D.C.; Type of district based on reanalysis of Elementary-Secondary General Information Survey (ELSEGIS), conducted by Office of Education 1969 and 1970; Salaries, see Tables 21, 23, 32, 37 and 38.

TABLE 40

TOTAL CURRENT EXPENDITURES AND MISCELLANEOUS SERVICES BY REGION AND TYPE OF DISTRICT, 1967-68
(Expenditures in Millions of Dollars)

Region	Total[1] Current Expenditures	Miscellaneous Services[2]	
		Expenditures	As % of Total Current Expenditures
NORTHEAST			
Central Cities	2,036.0	162.2	7.97
Other SMSA	2,893.5	159.0	5.50
Non-SMSA	1,240.1	69.8	5.63
TOTAL	6,169.6	391.0	6.34
NORTH CENTRAL			
Central Cities	2,024.4	150.3	7.42
Other SMSA	2,344.1	145.5	6.21
Non-SMSA	2,290.8	142.7	6.23
TOTAL	6,659.3	438.5	6.58
SOUTH			
Central Cities	2,220.4	181.8	8.19
Other SMSA	1,281.7	103.5	8.08
Non-SMSA	2,515.3	231.4	9.20
TOTAL	6,017.4	516.7	8.59
WEST			
Central Cities	1,634.1	133.4	8.16
Other SMSA	1,766.5	118.7	6.72
Non-SMSA	1,163.9	73.5	6.32
TOTAL	4,564.5	325.6	7.13
All Central Cities	7,914.9	627.7	7.93
All Other SMSA	8,285.8	526.7	6.36
All Non-SMSA	7,210.1	517.4	7.18
TOTAL U.S.	23,410.8	1,671.8	7.14

[1] Less Fixed Charges and Miscellaneous Services.

[2] Food Services (net), Student Body Activities, Community Services (less Junior Colleges), and Non-Retirement Fixed Charges.

Source: Regional totals from U.S. Department of Health, Education, and Welfare, Office of Education, Statistics of State School Systems, 1967-68 (preliminary figures), U.S. Government Printing Office, Washington, D.C.; Type of district based on reanalysis of Elementary-Secondary General Information Survey (ELSEGIS), conducted by Office of Education, 1969 and 1970.

TABLE 41

SUMMARY OF TOTAL CURRENT EXPENDITURES BY REGION AND TYPE OF DISTRICT, ESTIMATED 1967-68, PROJECTED 1975-76 AND 1980-81
(In Millions of 1967-68 Dollars)

1967-68

Region	Total Current Expenditures	Administration	Instruction Salaries	Instruction Other	Instruction Total
NORTHEAST					
Central Cities	2,392.4	90.1	1,491.1	103.3	1,594.4
Other SMSA	3,301.7	128.4	2,023.1	221.5	2,244.6
Non-SMSA	1,407.9	57.0	834.8	102.0	936.8
TOTAL	7,102.0	275.5	4,349.0	426.8	4,775.8
NORTH CENTRAL					
Central Cities	2,282.0	67.5	1,497.8	125.6	1,623.4
Other SMSA	2,613.8	100.4	1,718.8	121.4	1,840.2
Non-SMSA	2,526.3	107.8	1,637.3	127.8	1,765.1
TOTAL	7,422.1	275.7	4,853.9	374.8	5,228.7
SOUTH					
Central Cities	2,449.6	67.3	1,734.1	118.0	1,852.1
Other SMSA	1,440.0	41.2	984.2	68.2	1,052.4
Non-SMSA	2,830.2	98.7	1,854.4	169.2	2,023.6
TOTAL	6,719.8	207.2	4,572.7	355.4	4,928.1
WEST					
Central Cities	1,859.6	52.6	1,260.3	80.2	1,340.5
Other SMSA	1,986.9	57.8	1,351.7	93.2	1,444.9
Non-SMSA	1,287.0	45.1	838.3	71.9	910.2
TOTAL	5,133.5	155.5	3,450.3	245.3	3,695.6
All Central Cities	8,983.6	277.5	5,983.3	427.1	6,410.4
All Other SMSA	9,342.4	327.8	6,077.8	504.3	6,582.1
All Non-SMSA	8,051.4	308.6	5,164.8	470.9	5,635.7
TOTAL U.S.	26,377.4	913.9	17,225.9	1,402.3	18,628.2

Summary of Current Expenditures
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1967-68

Region	Operation of Plant	Maintenance of Plant	Attendance	Health	Transportation	Retirement	Misc. Services
NORTHEAST							
Central Cities	168.3	58.6	14.4	26.4	79.3	198.7	162.2
Other SMSA	268.4	93.8	5.8	48.5	133.7	219.5	159.0
Non-SMSA	109.9	35.3	1.9	19.7	90.5	87.0	69.8
TOTAL	546.6	187.7	22.1	94.6	303.5	505.2	391.0
NORTH CENTRAL							
Central Cities	215.9	76.7	12.5	16.8	26.0	92.9	150.3
Other SMSA	256.9	70.2	3.1	13.1	110.3	74.1	145.5
Non-SMSA	223.5	67.8	2.2	10.4	157.3	49.5	142.7
TOTAL	696.3	214.7	17.8	40.3	293.6	216.5	438.5
SOUTH							
Central Cities	165.2	82.4	8.8	12.1	29.6	50.3	181.8
Other SMSA	103.9	50.4	6.6	5.7	47.5	28.8	103.5
Non-SMSA	157.2	77.0	9.7	12.0	168.3	52.3	231.4
TOTAL	426.3	209.8	25.1	29.8	245.4	131.4	516.7
WEST							
Central Cities	138.4	73.9	8.5	14.7	23.[illegible]	74.2	133.4
Other SMSA	163.5	66.8	2.6	13.7	49.3	69.6	118.7
Non-SMSA	103.5	36.8	2.0	4.5	65.8	45.6	73.5
TOTAL	405.4	177.5	13.1	32.9	138.5	189.4	325.6
All Central Cities	687.8	291.6	44.2	70.0	158.3	416.1	627.7
All Other SMSA	792.7	281.2	18.1	81.0	340.8	392.0	526.7
All Non-SMSA	594.1	216.9	15.8	46.6	481.9	234.4	517.4
TOTAL U.S.	2,074.6	789.7	78.1	197.6	981.0	1,042.5	1,671.8

Summary of Current Expenditures
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1975-76

Region	Total Current Expenditures	Administration	Instruction		
			Salaries	Other	Total
NORTHEAST					
Central Cities	3,284.4	128.9	2,117.5	147.8	2,265.3
Other SMSA	5,695.6	231.1	3,612.8	398.9	4,011.7
Non-SMSA	2,357.7	101.2	1,467.1	180.7	1,647.8
TOTAL	11,337.7	461.2	7,197.4	727.4	7,924.8
NORTH CENTRAL					
Central Cities	2,951.8	91.9	1,995.8	170.8	2,166.6
Other SMSA	4,673.1	190.2	3,185.2	230.3	3,415.5
Non-SMSA	3,573.6	162.9	2,414.0	192.9	2,606.9
TOTAL	11,198.5	445.0	7,595.0	594.0	8,189.0
SOUTH					
Central Cities	3,681.2	104.4	2,668.3	183.3	2,851.6
Other SMSA	2,561.1	76.6	1,803.5	126.6	1,930.1
Non-SMSA	4,619.8	169.5	3,199.0	231.9	3,430.9
TOTAL	10,862.1	350.5	7,670.8	541.8	8,212.6
WEST					
Central Cities	2,756.4	80.5	1,909.5	122.6	2,032.1
Other SMSA	3,582.3	109.1	2,504.8	176.3	2,681.1
Non-SMSA	1,651.0	61.0	1,110.9	97.2	1,208.1
TOTAL	7,989.7	250.6	5,525.2	396.1	5,921.3
All Central Cities	12,673.8	405.7	8,691.1	624.5	9,315.6
All Other SMSA	16,512.1	607.0	11,106.3	932.1	12,038.4
All Non-SMSA	12,202.1	494.6	8,191.0	702.7	8,893.7
TOTAL U.S.	41,388.0	1,507.3	27,988.4	2,259.3	30,247.7

1975-76

Region	Operation of Plant	Maintenance of Plant	Attendance	Health	Transportation	Retirement	Misc. Services
NORTHEAST							
Central Cities	201.5	63.4	17.3	30.8	87.4	267.1	222.7
Other SMSA	404.2	127.6	8.8	71.1	193.5	370.0	277.6
Non-SMSA	160.3	46.5	2.8	28.0	111.9	141.1	118.1
TOTAL	766.0	237.5	28.9	129.9	392.8	778.2	618.4
NORTH CENTRAL							
Central Cities	236.7	76.5	14.3	18.6	33.9	117.5	195.8
Other SMSA	387.5	96.3	4.9	20.0	163.8	129.2	265.7
Non-SMSA	272.3	75.2	2.8	12.8	166.4	68.8	205.5
TOTAL	896.5	248.0	22.0	51.4	364.1	315.5	667.0
SOUTH							
Central Cities	215.0	94.6	11.6	15.3	41.6	74.0	273.1
Other SMSA	161.8	69.3	10.4	8.7	66.8	49.6	187.8
Non-SMSA	229.6	99.3	14.2	17.1	194.4	82.5	382.3
TOTAL	606.4	263.2	36.2	41.1	302.8	206.1	843.2
WEST							
Central Cities	180.7	89.9	11.1	18.7	36.2	107.3	199.9
Other SMSA	255.3	97.2	4.1	20.8	75.2	121.6	217.9
Non-SMSA	114.7	38.0	2.2	4.9	71.7	55.6	94.8
TOTAL	550.7	225.1	17.4	44.4	183.1	284.5	512.6
All Central Cities	833.9	324.4	54.3	83.4	199.1	565.9	891.5
All Other SMSA	1,208.8	390.4	28.2	120.6	499.3	670.4	949.0
All Non-SMSA	776.9	259.0	22.0	62.8	544.4	348.0	800.7
TOTAL U.S.	2,819.6	973.8	104.5	266.8	1,242.8	1,584.3	2,641.2

Summary of Current Expenditures
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1980-81

Region	Total Current Expenditures	Administration	Instruction		
			Salaries	Other	Total
NORTHEAST					
Central Cities	3,653.4	143.7	2,361.0	164.8	2,525.8
Other SMSA	6,691.4	272.7	4,263.7	470.7	4,734.4
Non-SMSA	2,636.5	113.6	1,646.8	202.9	1,849.7
TOTAL	12,981.3	530.0	8,271.5	838.4	9,109.9
NORTH CENTRAL					
Central Cities	3,268.7	101.7	2,208.5	189.0	2,397.5
Other SMSA	5,481.6	224.6	3,759.9	271.8	4,031.7
Non-SMSA	3,830.8	176.1	2,608.5	208.4	2,816.9
TOTAL	12,581.1	502.4	8,576.9	669.2	9,246.1
SOUTH					
Central Cities	4,355.3	123.8	3,166.2	217.5	3,383.7
Other SMSA	3,248.9	97.7	2,299.7	161.4	2,461.1
Non-SMSA	5,154.6	191.3	3.543.9	327.8	3,871.7
TOTAL	12,758.8	412.8	9,009.8	706.7	9,716.5
WEST					
Central Cities	3,164.6	92.4	2,192.1	140.7	2,332.8
Other SMSA	4,327.2	131.7	3,022.2	212.8	3,235.0
Non-SMSA	1,757.0	65.1	1,185.5	103.7	1,289.2
TOTAL	9,248.8	289.2	6,399.8	457.2	6,857.0
All Central Cities	14,442.0	461.6	9,927.8	712.0	10,639.8
All Other SMSA	19,749.1	726.7	13,345.5	1,116.7	14,462.2
All Non-SMSA	13,378.9	546.1	8,984.7	842.8	9,827.5
TOTAL U.S.	47,570.0	1,734.4	32,258.0	2,671.5	34,929.5

Summary of Current Expenditures
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1980-81

Region	Operation of Plant	Maintenance of Plant	Attendance	Health	Transportation	Retirement	Misc. Services
NORTHEAST							
Central Cities	227.3	67.1	18.2	32.3	93.9	297.4	247.7
Other SMSA	480.1	142.2	9.7	78.6	211.9	435.7	326.1
Non-SMSA	182.9	49.8	3.0	29.7	117.6	158.1	132.1
TOTAL	890.3	259.1	30.9	140.6	423.4	891.2	705.9
NORTH CENTRAL							
Central Cities	260.8	79.5	15.1	19.6	47.7	130.0	216.8
Other SMSA	452.8	106.1	5.4	22.3	175.1	152.0	311.6
Non-SMSA	290.0	75.5	2.9	13.1	162.2	73.8	220.3
TOTAL	1,003.6	261.1	23.4	55.0	385.0	355.8	748.7
SOUTH							
Central Cities	255.3	104.0	12.8	17.0	47.6	88.1	323.0
Other SMSA	208.3	82.5	12.5	10.4	74.3	64.0	238.1
Non-SMSA	253.1	101.3	14.7	17.6	185.1	93.4	426.4
TOTAL	716.7	287.8	40.0	45.0	307.0	245.5	987.5
WEST							
Central Cities	210.7	100.3	12.1	20.3	43.0	123.6	229.4
Other SMSA	314.5	114.6	4.6	23.9	91.6	148.2	263.1
Non-SMSA	123.8	39.3	2.2	4.9	70.9	60.8	100.8
TOTAL	649.0	254.2	18.9	49.1	205.5	332.6	593.3
All Central Cities	954.1	350.9	58.2	89.2	232.2	639.1	1,016.9
All Other SMSA	1,455.7	445.4	32.2	135.2	552.9	799.9	1,138.9
All Non-SMSA	849.8	265.9	22.8	65.3	535.8	386.1	879.6
TOTAL U.S.	3,259.6	1,062.2	113.2	289.7	1,320.9	1,825.1	3,035.4

Source: See Tables 21, 23, 24, 32, 37, 39 and 40.

SECTION 5

PROJECTIONS OF CONSTRUCTION OUTLAYS AND DEBT SERVICE FOR 1971-72 TO 1980-81

November 1971

PROJECTIONS OF CONSTRUCTION OUTLAYS AND DEBT SERVICE FOR 1971-72 TO 1980-81

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PROJECTIONS OF CONSTRUCTION OUTLAYS AND DEBT SERVICE FOR 1971-72 TO 1980-81

Construction Needs

The projections of the construction needs for the decade of the 1970's was derived from (1) estimates of enrollments for the period, and (2) construction completed during the period 1961 through 1970.

A special file containing school construction project data for the years 1967 through 1970 was obtained from School Management.[1] The file contained information on pupil spaces completed and the construction cost per pupil space, school district by school district. The file was processed to derive totals by type of district within region.

For the United States as a whole, it appeared that 2.5 per cent of all elementary school spaces and 3 per cent of all high school spaces were renovated or retired during a typical year. In other words, construction completed during the four years exceeded growth needs by the average of these amounts each of the four years 1967-1970.

The rate of replacement (renovation or retirement) varied by type of district within region. Some districts replaced more spaces than the national average, and others less. Generally the replacement was lowest in central cities and in those areas where the growth in enrollments was extremely rapid, e.g., southern rural high schools. Table 1 shows these replacement rates, experienced during 1967-70, along with the projected rates for the 1970's.

The estimates of needs for the period 1971-80 were derived as follows: (1) enrollment increases, if any, were calculated for each of the five-year periods during the decade by level of school; (2) the replacement rates of 12.5 and 15 per cent (for five years) were applied to the appropriate average enrollments in elementary and secondary schools by type of school district within region; and (3) for those school districts which had not replaced existing school buildings at the national average rate, a "catch up" factor equal to one-half of the calculated lag in the past five years was added to the replacement rate. The results of the calculations appear in Table 2.

Because construction expenditures do not necessarily occur during the during the same year there is a need, but generally lag behind, and since the estimates for the second five-year period were generally lower in elementary education (some 15 per cent), and seemed to taper off in secondary, it seemed reasonable to average the calculated needs over a ten-year period. Other equally good assumptions could be made, but in this case it was decided to follow the level projections of construction adopted by U.S.O.E. The resultant projections are shown in Table 3.

Cost Per Pupil Space

Construction costs by type of district within region vary quite considerably from year to year even after they are deflated to a constant dollar base. The 1967-70 costs per pupil space by type of district within region in both current and constant dollars are shown in Table 4.

The reasons for these changes are (1) possible changes in the mix of construction, e.g., with one year being heavily weighted by building in New York City, a high-cost, central-city district in the Northeast, and (2) economic conditions in a given area. When construction demand in a given area is low, e.g., the West during the past few years, contractors bid lower on school buildings.

With these two considerations in mind, it was decided to average the cost per pupil space in constant dollars by type of district, and use it as a base for estimates in the next decade.

This does not mean that the cost per pupil space is projected level for the next ten years. Even after the effects of price increases are allowed for, the cost of construction increased 0.8 per cent per year faster than the price index during the decade of the 1960's.

The costs per pupil space for 1975-76 and 1980-81 are shown in Tables 5 and 6. The total construction outlays in 1975-76 and 1980-81 are shown in Table 7, along with the comparable figures for 1967-68. Since it was assumed that the number of pupil spaces built will be the same in both years, the relative price increase accounts for the increase in outlay from 1975-76 to 1980-81.

Bond Issues

Not all of construction outlays are financed by debt of local educational authorities. Some construction outlays are subsidized by states, others are paid out of current revenue. The pattern varies from region to region.

The ratio of construction costs financed by local bond issues, region by region, was derived by dividing estimated construction outlays for 1967-70 by bond issues for 1966-67 to 1969-70. These are reproduced in Table 8. The projections of local public school bond issues, based on these ratios, for 1975-76 and 1980-81 are given in Table 9, along with the comparable figures for 1967-68.

Debt Service

The debt service requirements by type of district within region were estimated in three steps: (1) debt service on debt issued before 1962; (2) debt service on debt issued between 1962 and 1971; and (3) debt service on future debt issues necessary to finance construction for the rest of the decade.

Pre-1962 Debt - The public school debt issued before 1962 was analyzed separately because its debt service pattern varies from year to year. This is due to the fact that the pre-1962 debt was contracted over a substantial period of years preceding 1962. Assuming that the maturity of school debt is about 25 years, it is obvious that some of the debt, which had been contracted in 1938 ran out in 1963, and no further interest or debt repayments were due on that part thereafter. Likewise, by 1980, all debt contracted before 1955 would no longer require any service. The total debt service requirements for this part of the total debt are seen to decrease steadily from year to year until the late 1980's when they disappear entirely. This is quite different from the behavior of the debt issued over a shorter period of time (say, a few years) which is closely approximated by a simple mortgage payoff model with a constant annual payment to cover both interest and principal retirement.

In order to describe this behavior, a simulation of the year-by-year buildup and payoff of the pre-1962 debt was made using data on school debt published by the U.S. Census of Governments.[2] This provided the necessary information on interest and debt repayment for both 1962 and 1967, and debt outstanding in each period. It was assumed that the amount of debt issued increased at 7 per cent a year, in line with data published by the U.S. Bureau of the Census. As a result of this simulation, debt repayment and interest on the pre-1962 debt were estimated for 1967 and later years.

Post-1962 Debt - A residual figure was calculated to estimate the characteristics of the debt issued between 1962 and 1966. The post-1962 debt was retired as a mortgage and estimates were made of its average remaining life, interest rate, etc. The remaining lives, given in Table 10, ranged between 16 years for the West and 23 years in the South. Small regional variations in interest rates were obtained.

Given recent experience of debt maturities, described below, the estimates of interest and debt service for the pre-1962 debt appeared to be validated.

It was assumed that the debt retirement schedules for both the 1962-66 debt and the 1966-67 debt would be similar to mortgages, and the results were projected to 1967-68 and combined with the pre-1962 debt characteristics for that year.

The next piece of the debt service and interest puzzle was to adjust the debt, in order to achieve agreement with the debt service figures reported by U.S.O.E. for 1967-68.[3] Disagreement at this stage was expected since the bases for reporting are different. Specifically, the debt of public school housing authorities is not reported by the U.S. Census. Hence an adjustment had to be made to increase the pre-1962 and 1962-66 debt figures reported to the total debt actually incurred. The reported debt was scaled up on a regional basis by the ratio of the interest reported by U.S.O.E. for 1967-68 to the interest reported (less interest on the 1966-67 debt) by the U.S. Census. Hence, it was tacitly assumed that the interest rate for the debt of public school housing authorities was the same as that for the local educational debt.

The allocation of pre-1962, 1962-66, and 1966-67 debts to type of school district, within each region, was made in proportion to debt interest reported in ELSEGIS.[4] Thus, for the years 1967-68 to 1980-81, the debt service, debt retirement, and interest payments based upon estimates of maturities and interest rates derived from the U.S. Bureau of the Census have been allocated accordingly.

The total amount of debt issued by region, as well as average interest rates, for 1967-1971, were taken from U.S.O.E. compilations of school bond debt. (See Table 11.)

New issues were allocated within regions in proportion to construction completed by type of district during this period. Differential maturities and interest rates were assigned to each type of school district within region based upon a sample of bond issues from a listing of school bond issues compiled by the American Bankers' Association for U.S.O.E.

The rates and average maturities for that period appear in Table 12. Note that the average maturity is approximately 60 per cent of the maximum maturity of bonds in a given issue.

The estimated rates for bonds issued from 1967-68 through 1970-71 by type of district and region are shown in Table 13. The results for the debt issued up through 1970-71 are shown in Table 14, debt outstanding, and Table 15, debt service requirements, for 1967-68, 1975-76 and 1980-81.

Future Debt - The post-1971 debt was assigned maturities and interest rates as in Tables 14 and 15 for 1970-71. The estimated debt service required for financing the construction outlays, projected in the beginning of this section, for 1975-76 and 1980-81 are shown in Table 16.

Table 17 presents the simulated (total) debt service requirements for local public school debt at constant prices. This represents the combination of the debt service requirements for both the existing and future debts, taking into account only the projected relative construction cost increases on the assumption that price level remains constant.

Table 18 gives the details concerning the debt issued up to and including 1970-71. Estimates of the total debt outstanding at year's end, debt retired, interest paid, and total debt service, are presented for each year through 1980 by region and type of residence.

Other Capital Expenditures

The U.S.O.E. reports the purchases of some furniture, books and motor vehicles as other capital expenditures or new equipment. No detailed analysis was made of these expenditures or how their purchase is financed.

For the sake of completeness, however, a simple methodology was employed to derive cost figures for these items. The procedure outlined for other current expenditures was used to allocate the reported 1967-68 regional expenditures to each type of district. These costs were then taken as a percentage of total instructional expenditures for that year. These same percentages were used to make estimates for 1975-76 and 1980-81. (See Table 19.)

FOOTNOTES

[1] Annual survey of public school construction costs by School Management. Regional and State summaries are reported in the July issue each year.

[2] U.S. Bureau of the Census, Census of Governments, 1967, Vol. 4, No. 1: Finances of School Districts, U.S. Government Printing Office, Washington, D.C., 1969.

[3] U.S. Department of Health, Education, and Welfare, Office of Education, National Center for Educational Statistics, Statistics of State School Systems 1967-68, forthcoming.

[4] U.S. Department of Health, Education, and Welfare, Office of Education, National Center for Educational Statistics, Elementary-Secondary General Information Survey (ELSEGIS), 1967-68 and 1968-69. Data files were processed to provide summaries by type of district within region.

TABLE 1

ESTIMATED AND PROJECTED FIVE-YEAR PLANT REPLACEMENT RATES BY TYPE OF DISTRICT WITHIN REGION
(Per Cent of Capacity)

Region	Elementary		Secondary	
	1967-70	1971-80	1967-70	1971-80
NORTHEAST				
Central Cities	6.6	15.5	10.8	17.1
Other SMSA	15.3	12.5	23.1	15.0
Non-SMSA	21.3	12.5	19.8	15.0
NORTH CENTRAL				
Central Cities	8.3	14.6	16.4	15.0
Other SMSA	13.9	12.5	22.0	15.0
Non-SMSA	15.7	12.5	23.5	15.0
SOUTH				
Central Cities	10.5	18.7	13.0	16.0
Other SMSA	19.1	12.5	25.9	15.0
Non-SMSA	10.9	13.3	-	22.5
WEST				
Central Cities	-	18.7	18.3	15.0
Other SMSA	15.6	12.5	-	22.5
Non-SMSA	14.5	12.5	22.3	15.0

Source: 1967-70 figures derived from School Management Magazine data file.

TABLE 2

COMPUTED PUBLIC SCHOOL CONSTRUCTION NEEDS BY LEVEL, REGION AND TYPE OF DISTRICT
(Pupil Capacity in Thousands)

	Elementary			Elementary		
	1971-72 to 1975-76			1976-77 to 1980-81		
Region	Growth	Replacement	Total	Growth	Replacement	Total
NORTHEAST						
Central Cities	-	243	243	11	230	241
Other SMSA	3	330	333	156	340	496
Non-SMSA	-	162	162	8	158	166
TOTAL	3	735	738	175	728	903
NORTH CENTRAL						
Central Cities	-	295	295	-	273	273
Other SMSA	127	380	507	177	399	576
Non-SMSA	-	323	323	-	299	299
TOTAL	127	998	1,125	177	971	1,148
SOUTH						
Central Cities	-	533	533	-	504	504
Other SMSA	151	227	378	115	243	358
Non-SMSA	-	523	523	-	479	479
TOTAL	151	1,283	1,434	115	1,226	1,341
WEST						
Central Cities	-	327	327	55	327	382
Other SMSA	138	281	419	250	305	555
Non-SMSA	-	140	140	-	131	131
TOTAL	138	748	886	305	763	1,068
All Central Cities	-	1,398	1,398	66	1,334	1,400
All Other SMSA	419	1,218	1,637	698	1,287	1,985
All Non-SMSA	-	1,148	1,148	8	1,067	1,075
TOTAL U.S.	419	3,764	4,183	772	3,688	4,460

	Secondary			Secondary		
	1971-72 to 1975-76			1976-77 to 1980-81		
Region	Growth	Replacement	Total	Growth	Replacement	Total
NORTHEAST						
Central Cities	169	213	382	-	223	223
Other SMSA	469	338	807	28	375	403
Non-SMSA	188	157	345	-	170	170
TOTAL	826	708	1,534	28	768	796
NORTH CENTRAL						
Central Cities	53	195	248	-	195	195
Other SMSA	471	314	785	8	350	358
Non-SMSA	112	278	390	-	277	277
TOTAL	636	787	1,423	8	822	830
SOUTH						
Central Cities	185	330	515	36	347	383
Other SMSA	229	198	427	127	225	352
Non-SMSA	206	653	859	-	659	659
TOTAL	620	1,181	1,801	163	1,231	1,394
WEST						
Central Cities	151	175	326	40	189	229
Other SMSA	288	360	648	110	405	515
Non-SMSA	60	124	184	-	126	126
TOTAL	499	659	1,158	150	720	870
All Central Cities	558	913	1,471	76	954	1,030
All Other SMSA	1,457	1,210	2,667	273	1,355	1,628
All Non-SMSA	566	1,212	1,778	-	1,232	1,232
TOTAL U.S.	2,581	3,335	5,916	349	3,541	3,890

TABLE 3

PROJECTED ANNUAL PUBLIC SCHOOL CONSTRUCTION BY REGION AND TYPE OF DISTRICT, 1971-80
(Pupil Capacity in Thousands)

Region	Elementary	Secondary
NORTHEAST		
Central Cities	48.4	60.5
Other SMSA	82.9	121.0
Non-SMSA	32.8	51.5
TOTAL	164.1	233.0
NORTH CENTRAL		
Central Cities	56.8	44.3
Other SMSA	108.3	114.3
Non-SMSA	62.2	66.7
TOTAL	227.3	225.3
SOUTH		
Central Cities	103.7	89.8
Other SMSA	73.6	77.9
Non-SMSA	100.2	151.8
TOTAL	277.5	319.5
WEST		
Central Cities	70.9	55.5
Other SMSA	97.4	116.3
Non-SMSA	27.1	31.0
TOTAL	195.4	202.8
All Central Cities	279.8	250.1
All Other SMSA	362.2	429.5
All Non-SMSA	222.3	301.0
TOTAL U.S.	864.3	980.6

TABLE 4

ESTIMATED UNIT COSTS OF PUBLIC SCHOOL CONSTRUCTION, 1967 TO 1970, BY TYPE OF DISTRICT WITHIN REGION (IN CURRENT AND CONSTANT 1967-68 DOLLARS PER PUPIL SPACE).

Elementary

Region	Current Dollars				1967-68 Dollars			
	1967	1968	1969	1970	1967	1968	1969	1970
NORTHEAST								
Central Cities	1,930	1,556	2,402	2,396	1,982	1,517	2,260	2,069
Other SMSA	1,642	1,722	1,967	2,391	1,686	1,678	1,850	2,065
Non-SMSA	1,543	1,771	1,947	2,071	1,584	1,726	1,832	1,788
NORTH CENTRAL								
Central Cities	1,189	1,425	1,374	1,553	1,221	1,389	1,293	1,341
Other SMSA	1,210	1,292	1,470	1,486	1,242	1,259	1,383	1,283
Non-SMSA	1,185	1,305	1,415	1,498	1,217	1,272	1,331	1,294
SOUTH								
Central Cities	993	1,185	1,136	1,248	1,020	1,155	1,069	1,078
Other SMSA	908	1,102	1,338	1,343	932	1,074	1,259	1,160
Non-SMSA	905	960	1,047	1,172	929	936	985	1,012
WEST								
Central Cities	1,105	1,140	1,343	1,297	1,134	1,111	1,263	1,120
Other SMSA	1,157	1,265	1,279	1,372	1,188	1,232	1,203	1,185
Non-SMSA	1,212	1,426	1,241	1,634	1,244	1,390	1,167	1,411

Estimated Unit Costs of Public
School Construction, 1967 to 1970
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Region	Secondary							
	Current Dollars				1967-68 Dollars			
	1967	1968	1969	1970	1967	1968	1969	1970
NORTHEAST								
Central Cities	2,642	2,633	3,293	3,710	2,713	2,566	3,098	3,204
Other SMSA	2,628	2,798	3,088	3,593	2,698	2,727	2,905	3,103
Non-SMSA	2,390	2,497	2,892	3,380	2,454	2,434	2,721	2,919
NORTH CENTRAL								
Central Cities	2,305	2,676	2,648	2,850	2,367	2,608	2,491	2,461
Other SMSA	2,070	2,241	2,464	2,488	2,125	2,184	2,318	2,149
Non-SMSA	2,007	2,129	2,599	2,422	2,061	2,075	2,445	2.092
SOUTH								
Central Cities	1,550	1,830	1,713	2,145	1,591	1,784	1,611	1,852
Other SMSA	1,456	1,461	1,905	1,734	1,495	1,424	1,792	1,497
Non-SMSA	1,558	1,538	1,671	1,737	1,600	1,499	1,572	1,500
WEST								
Central Cities	1,986	1,836	2,028	1,880	2,039	1,789	1,908	1,623
Other SMSA	1,833	2,026	2,043	2,423	1,882	1,975	1,922	2,092
Non-SMSA	2,031	1,951	1,882	2,488	2,085	1,902	1,770	2,149

Source: School Management Magazine data file. Current dollars deflated by SM School Construction Cost Index to obtain constant dollars.

TABLE 5

PROJECTED UNIT COSTS PUBLIC SCHOOL CONSTRUCTION BY TYPE OF DISTRICT WITHIN REGION, 1975-76
(In Adjusted 1967-68 Dollars per Pupil Space)

Region	Elementary	Secondary
NORTHEAST		
Central Cities	2,029	3,020
Other SMSA	1,872	2,976
Non-SMSA	1,800	2,729
NORTH CENTRAL		
Central Cities	1,379	2,589
Other SMSA	1,345	2,296
Non-SMSA	1,332	2,265
SOUTH		
Central Cities	1,127	1,774
Other SMSA	1,141	1,616
Non-SMSA	1,004	1,620
WEST		
Central Cities	1,202	1,980
Other SMSA	1,261	2,044
Non-SMSA	1,367	2,066

TABLE 6

PROJECTED UNIT COSTS PUBLIC SCHOOL CONSTRUCTION BY TYPE OF DISTRICT WITHIN REGION, 1980-81
(In Adjusted 1967-68 Dollars per Pupil Space)

Region	Elementary	Secondary
NORTHEAST		
Central Cities	2,111	3,143
Other SMSA	1,948	3,097
Non-SMSA	1,873	2,840
NORTH CENTRAL		
Central Cities	1,435	2,695
Other SMSA	1,400	2,389
Non-SMSA	1,386	2,357
SOUTH		
Central Cities	1,173	1,846
Other SMSA	1,187	1,681
Non-SMSA	1,044	1,686
WEST		
Central Cities	1,251	2,061
Other SMSA	1,312	2,127
Non-SMSA	1,423	2,150

TABLE 7

CONSTRUCTION COSTS FOR PUBLIC SCHOOLS BY REGION AND TYPE OF DISTRICT, ESTIMATED 1967-68, AND PROJECTED 1975-76 AND 1980-81

(In Millions of Adjusted 1967-68 Dollars)

Region	1967-68	1975-76	1980-81
NORTHEAST			
Central Cities	117	281	292
Other SMSA	611	515	536
Non-SMSA	309	200	208
TOTAL	1,036	996	1,036
NORTH CENTRAL			
Central Cities	182	193	201
Other SMSA	492	408	425
Non-SMSA	414	234	243
TOTAL	1,088	835	869
SOUTH			
Central Cities	219	276	287
Other SMSA	185	210	218
Non-SMSA	331	346	360
TOTAL	735	832	866
WEST			
Central Cities	143	195	203
Other SMSA	324	360	375
Non-SMSA	196	101	105
TOTAL	663	656	683
All Central Cities	661	945	983
All Other SMSA	1,612	1,494	1,554
All Non-SMSA	1,250	881	917
TOTAL U.S.	3,523	3,320	3,455

Source: 1967-68 figures derived from School Management Magazine data file.

TABLE 8

SHARE OF NEW PUBLIC SCHOOL CONSTRUCTION FINANCED BY LOCAL BOND ISSUES, BY REGION

(In Millions of Current Dollars and Per Cent)

	Bonds Issued 1966-67 to 1969-70	Construction 1967 to 1970	Per Cent Financed by Bond Issues
NORTHEAST	3,390	4,325	78.4
NORTH CENTRAL	3,548	4,207	84.3
SOUTH	2,642	2,784	94.9
WEST	1,759	2,270	77.5
TOTAL U.S.	11,339	13,586	83.5

Source: Bonds Issued: compiled from U.S. Department of Health, Education, and Welfare, Office of Education, National Center for Educational Statistics, Bond Sales for Public School Purposes, 1966-67 through 1969-70, Government Printing Office, Washington, D.C., various years. Construction: adapted from School Management Magazine data file.

TABLE 9

BOND ISSUES FOR SCHOOL PURPOSES BY PUBLIC SCHOOL DISTRICTS AND LOCAL AUTHORITIES, BY REGION AND TYPE OF DISTRICT, ESTIMATED 1967-68 AND PROJECTED 1975-76 AND 1980-81

(In Millions of Adjusted 1967-68 Dollars)

Region	1967-68	1975-76	1980-81
NORTHEAST			
Central Cities	99	220	229
Other SMSA	503	404	420
Non-SMSA	256	156	163
TOTAL	859	780	812
NORTH CENTRAL			
Central Cities	138	163	169
Other SMSA	385	344	358
Non-SMSA	325	197	205
TOTAL	848	704	732
SOUTH			
Central Cities	189	262	273
Other SMSA	188	199	207
Non-SMSA	275	329	342
TOTAL	652	790	822
WEST			
Central Cities	82	151	157
Other SMSA	196	279	291
Non-SMSA	114	78	82
TOTAL	392	508	530
All Central Cities	508	796	828
All Other SMSA	1,272	1,226	1,276
All Non-SMSA	970	760	792
TOTAL U.S.	2,750	2,782	2,896

Source: 1967-68 regional figures from U.S. Department of Health, Education, and Welfare, Office of Education, National Center for Educational Statistics, Bond Sales for Public School Purposes, 1967-68, Government Printing Office, Washington, D.C., January 1969. Allocation to type of district made in proportion to total construction from School Management Magazine data file.

TABLE 10

INFERRED CHARACTERISTICS OF PUBLIC SCHOOL DEBT ISSUED 1961-62 THROUGH 1965-66, BY REGION

	Remaining Life (years)	Interest Rate (per cent)
NORTHEAST	21	3.51
NORTH CENTRAL	20	3.68
SOUTH	23	3.65
WEST	16	3.56

Source: Computed by comparing 1962 Census of Governments, 1967 Census of Governments, and simulation of pre-1962 debt. Simple mortgage model used for debt issued 1961-62 through 1965-66.

TABLE 11

LOCAL PUBLIC SCHOOL BONDS ISSUED AND AVERAGE INTEREST RATES 1966-67 TO 1970-71, BY REGION
(In Millions of Current Dollars and Per Cent)

	1966-67	1967-68	1968-69	1969-70	1970-71
NORTHEAST					
Bonds Issued	848	859	829	854	1,488
Average Interest Rate	3.99	4.57	4.92	6.56	5.62
NORTH CENTRAL					
Bonds Issued	1,015	848	842	843	886
Average Interest Rate	4.03	4.53	4.98	6.36	5.41
SOUTH					
Bonds Issued	684	652	670	635	813
Average Interest Rate	4.04	4.59	4.82	6.27	5.43
WEST					
Bonds Issued	528	392	547	292	411
Average Interest Rate	4.05	4.54	4.75	6.41	5.21

Source: Compiled from U.S. Department of Health, Education, and Welfare, Office of Education, National Center for Educational Statistics, Bond Sales for Public School Purposes, 1966-67 through 1970-71, Government Printing Office, Washington, D.C., various years.

TABLE 12

AVERAGE INTEREST RATES AND MATURITIES, LOCAL PUBLIC SCHOOL BOND ISSUES, BY REGION AND TYPE OF DISTRICT

Region	Interest Rate (Per Cent)	Average Maturity (Years)
NORTHEAST		
Central Cities	6.88	11.1
Other SMSA	5.95	13.8
Non-SMSA	5.54	12.3
TOTAL	5.94	13.0
NORTH CENTRAL		
Central Cities	5.84	9.9
Other SMSA	5.87	9.7
Non-SMSA	5.63	12.1
TOTAL	5.78	10.7
SOUTH		
Central Cities	5.52	12.7
Other SMSA	5.67	12.3
Non-SMSA	6.04	12.4
TOTAL	5.78	12.5
WEST		
Central Cities	5.51	9.5
Other SMSA	5.49	9.4
Non-SMSA	5.67	7.5
TOTAL	5.55	8.9

Source: Computed from a sampling of school bond issues, July 1969-May 1971, compiled by the American Bankers' Association for the U.S. Office of Education. Regional averages are weighted using construction outlays from School Management Magazine data file.

TABLE 13

ESTIMATED INTEREST RATES FOR LOCAL PUBLIC SCHOOL BONDS ISSUED 1967-68 TO 1970-71, BY REGION AND TYPE OF DISTRICT
(Per Cent)

Region	1967-68	1968-69	1969-70	1970-71
NORTHEAST				
Central Cities	5.52	5.87	7.51	6.57
Other SMSA	4.58	4.93	6.57	5.63
Non-SMSA	4.18	4.53	6.17	5.23
TOTAL	4.57	4.92	6.56	5.62
NORTH CENTRAL				
Central Cities	4.60	5.05	6.43	5.48
Other SMSA	4.63	5.08	6.46	5.51
Non-SMSA	4.39	4.84	6.22	5.27
TOTAL	4.53	4.98	6.36	5.41
SOUTH				
Central Cities	4.32	4.55	6.00	5.16
Other SMSA	4.48	4.71	6.16	5.32
Non-SMSA	4.84	5.08	6.53	5.69
TOTAL	4.59	4.82	6.27	5.43
WEST				
Central Cities	4.50	4.71	6.37	5.17
Other SMSA	4.49	4.70	6.36	5.16
Non-SMSA	4.66	4.87	6.53	5.33
TOTAL	4.54	4.75	6.41	5.21

TABLE 14

ESTIMATED PRE-1971-72 PUBLIC SCHOOL DEBT OUTSTANDING AT BEGINNING OF SELECTED YEARS

(In Millions of Current Dollars)

Region	1967-68	1975-76	1980-81
NORTHEAST			
Central Cities	1,653	1,260	712
Other SMSA	4,834	4,590	2,889
Non-SMSA	1,917	2,017	1,260
TOTAL	8,404	7,867	4,861
NORTH CENTRAL			
Central Cities	1,667	1,254	640
Other SMSA	2,981	2,654	1,385
Non-SMSA	2,205	2,170	1,287
TOTAL	6,853	6,078	3,313
SOUTH			
Central Cities	1,947	1,753	1,116
Other SMSA	2,110	1,839	1,159
Non-SMSA	1,887	2,021	1,316
TOTAL	5,943	5,613	3,591
WEST			
Central Cities	2,114	1,171	404
Other SMSA	1,949	1,438	564
Non-SMSA	1,604	996	286
TOTAL	5,667	3,606	1,253
All Central Cities	7,380	5,438	2,872
All Other SMSA	11,874	10,522	5,997
All Non-SMSA	7,612	7,204	4,149
TOTAL U.S.	26,867	23,164	13,018

TABLE 15

ESTIMATED DEBT SERVICE REQUIREMENTS
PUBLIC SCHOOL DEBT ISSUED BEFORE 1971-72
BY REGION AND TYPE OF DISTRICT
(In Millions of Current Dollars)

Region	1967-68	1975-76	1980-81
NORTHEAST			
Central Cities	155	167	137
Other SMSA	452	548	459
Non-SMSA	180	239	204
TOTAL	786	954	800
NORTH CENTRAL			
Central Cities	166	180	143
Other SMSA	297	375	309
Non-SMSA	220	276	228
TOTAL	682	831	680
SOUTH			
Central Cities	179	204	168
Other SMSA	194	217	178
Non-SMSA	173	234	199
TOTAL	545	655	544
WEST			
Central Cities	226	206	157
Other SMSA	208	238	193
Non-SMSA	172	185	148
TOTAL	606	629	497
All Central Cities	726	757	604
All Other SMSA	1,151	1,378	1,138
All Non-SMSA	744	935	779
TOTAL U.S.	2,620	3,070	2,521

TABLE 16

PROJECTED DEBT SERVICE REQUIREMENTS
1971-72 TO 1980-81 PUBLIC SCHOOL DEBT
(In Millions of Adjusted 1967-68 Dollars)

Region	1975-76	1980-81
NORTHEAST		
Central Cities	83	190
Other SMSA	128	295
Non-SMSA	50	114
TOTAL	261	599
NORTH CENTRAL		
Central Cities	60	138
Other SMSA	128	294
Non-SMSA	64	146
TOTAL	252	578
SOUTH		
Central Cities	82	189
Other SMSA	64	148
Non-SMSA	110	252
TOTAL	256	588
WEST		
Central Cities	56	128
Other SMSA	104	239
Non-SMSA	34	78
TOTAL	194	445
All Central Cities	281	644
All Other SMSA	425	976
All Non-SMSA	257	590
TOTAL U.S.	963	2,210

TABLE 17

ESTIMATED AND SIMULATED DEBT SERVICE REQUIREMENTS, TOTAL LOCAL PUBLIC SCHOOL DEBT, BY REGION AND TYPE OF DISTRICT
(In Millions of Adjusted 1967-68 Dollars)

Region	1967-68	1975-76	1980-81
NORTHEAST			
Central Cities	155	250	327
Other SMSA	452	676	753
Non-SMSA	180	289	318
TOTAL	786	1,215	1,399
NORTH CENTRAL			
Central Cities	166	240	281
Other SMSA	297	503	603
Non-SMSA	220	340	374
TOTAL	682	1,083	1,258
SOUTH			
Central Cities	179	286	356
Other SMSA	194	282	326
Non-SMSA	173	344	451
TOTAL	545	912	1,133
WEST			
Central Cities	226	262	284
Other SMSA	208	342	432
Non-SMSA	172	219	226
TOTAL	606	823	942
All Central Cities	726	1,038	1,248
All Other SMSA	1,151	1,803	2,114
All Non-SMSA	744	1,192	1,369
TOTAL U.S.	2,620	4,033	4,731

TABLE 18
ESTIMATED CHARACTERISTICS FOR EXISTING DEBT BY REGION, TYPE OF DISTRICT AND YEAR, 1967-80
(in Millions of Current Dollars)

NORTHEAST	YEAR	DEBT OUT	DEBT RET	INTEREST	DEBT SERV
Central Cities	67	1652.76	91.26	54.24	145.50
	68	1654.93	97.02	57.79	154.81
	69	1650.19	100.54	59.92	160.46
	70	1645.00	103.88	62.00	165.88
	71	1710.09	106.90	65.68	172.58
	72	1597.77	112.31	73.01	185.32
	73	1485.14	112.61	68.69	181.30
	74	1372.48	112.68	64.30	176.98
	75	1260.00	112.48	59.89	172.37
	76	1148.03	111.99	55.45	167.44
	77	1036.85	111.15	50.99	162.14
	78	926.88	109.98	46.50	156.48
	79	818.45	108.42	42.03	150.45
	80	712.03	106.42	37.55	143.97
Other SMSA	67	4834.16	266.93	158.65	425.58
	68	5052.38	283.79	169.01	452.80
	69	5239.39	297.99	182.21	480.20
	70	5428.13	311.26	195.69	506.95
	71	5976.27	322.96	217.45	540.41
	72	5630.94	345.32	254.62	599.94
	73	5284.28	346.67	241.46	588.13
	74	4936.93	347.34	228.21	575.55
	75	4589.73	347.22	214.82	562.04
	76	4243.50	346.23	201.37	547.60
	77	3899.21	344.30	187.84	532.14
	78	3557.90	341.32	174.29	515.61
	79	3220.72	337.16	160.74	497.90
	80	2888.96	331.77	147.21	478.98
Non-SMSA	67	1916.82	105.84	62.90	168.74
	68	2060.29	112.53	67.01	179.54
	69	2187.46	120.83	73.84	194.67
	70	2313.61	128.86	80.84	209.70
	71	2621.58	136.32	91.97	228.29
	72	2471.83	149.75	110.18	259.93
	73	2320.98	150.85	104.41	255.26
	74	2169.30	151.67	98.58	250.25
	75	2017.07	152.22	92.68	244.90
	76	1864.63	152.45	86.72	239.17
	77	1712.30	152.32	80.70	233.02
	78	1560.48	151.82	74.66	226.48
	79	1409.59	150.88	68.60	219.48
	80	1260.14	149.45	62.50	211.95

TABLE 18 (CONTINUED)
ESTIMATED CHARACTERISTICS FOR EXISTING DEBT BY REGION, TYPE OF DISTRICT AND YEAR, 1967-80
(in Millions of Current Dollars)

NORTH CENTRAL	YEAR	DEBT OUT.	DEBT RET.	INTEREST	DEBT SERV.
Central Cities	67	1667.10	96.25	53.19	149.44
	68	1698.91	106.20	59.83	166.03
	69	1723.98	111.92	62.46	174.38
	70	1743.53	117.46	65.41	182.87
	71	1765.19	122.45	69.95	192.40
	72	1637.05	128.14	73.24	201.38
	73	1508.86	128.21	68.30	196.51
	74	1380.92	127.94	63.31	191.25
	75	1253.54	127.36	58.33	185.69
	76	1127.16	126.40	53.31	179.71
	77	1002.11	125.04	48.28	173.32
	78	878.92	123.19	43.27	166.46
	79	758.03	120.88	38.25	159.13
	80	640.04	118.02	33.29	151.31
Other SMSA	67	2980.76	172.10	95.09	267.19
	68	3175.86	189.89	106.98	296.87
	69	3351.76	206.11	118.17	324.28
	70	3512.64	222.12	130.18	352.30
	71	3678.01	237.04	146.70	383.74
	72	3423.87	254.15	159.66	413.81
	73	3168.26	255.61	149.46	405.07
	74	2911.66	256.59	139.14	395.73
	75	2654.59	257.06	128.69	385.75
	76	2397.65	256.95	118.12	375.07
	77	2141.48	256.16	107.43	363.59
	78	1886.80	254.67	96.69	351.36
	79	1634.40	252.41	85.87	338.28
	80	1385.15	249.25	74.99	324.24
Non-SMSA	67	2204.78	127.29	70.33	197.62
	68	2389.32	140.45	79.13	219.58
	69	2561.62	150.71	88.49	239.20
	70	2723.93	160.68	98.75	259.43
	71	2893.84	169.87	112.99	282.86
	72	2713.42	180.41	124.44	304.85
	73	2532.43	181.00	117.42	298.42
	74	2351.25	181.18	110.32	291.50
	75	2170.30	180.95	103.16	284.11
	76	1990.05	180.25	95.95	276.20
	77	1811.01	179.03	88.71	267.74
	78	1633.77	177.24	81.45	258.69
	79	1458.98	174.81	74.19	249.00
	80	1287.28	171.70	66.93	238.63

TABLE 18 (CONTINUED)
ESTIMATED CHARACTERISTICS FOR EXISTING DEBT BY REGION, TYPE OF DISTRICT AND YEAR, 1967-80
(in Millions of Current Dollars)

SOUTH	YEAR	DEBT OUT.	DEBT RET.	INTEREST	DEBT SERV.
Central Cities	67	1946.66	101.44	64.67	166.11
	68	2027.18	108.48	70.18	178.66
	69	2106.94	114.26	74.52	188.78
	70	2170.81	120.13	79.26	199.39
	71	2280.98	125.12	85.95	211.07
	72	2149.03	131.96	93.42	225.38
	73	2016.87	132.16	88.41	220.57
	74	1884.80	132.06	83.34	215.40
	75	1753.18	131.62	78.26	209.88
	76	1622.39	130.79	73.18	203.97
	77	1492.81	129.56	68.11	197.67
	78	1364.94	127.87	63.02	190.89
	79	1239.24	125.69	57.97	183.66
	80	1116.28	122.96	52.96	175.92
Other SMSA	67	2109.98	109.95	70.10	180.05
	68	2180.41	117.58	76.07	193.65
	69	2249.90	123.51	80.33	203.84
	70	2303.75	129.15	85.01	214.16
	71	2403.87	134.28	91.58	225.86
	72	2262.60	141.27	99.05	240.32
	73	2121.15	141.45	93.65	235.10
	74	1979.84	141.30	88.21	229.51
	75	1839.07	140.77	82.76	223.53
	76	1699.22	139.83	77.30	217.13
	77	1560.78	138.46	71.82	210.28
	78	1424.18	136.58	66.36	202.94
	79	1290.01	134.17	60.95	195.12
	80	1158.86	131.17	55.56	186.73
Non-SMSA	67	1886.62	98.31	62.68	160.99
	68	2056.48	105.13	68.01	173.14
	69	2225.96	113.52	77.65	191.17
	70	2371.87	122.09	87.91	210.00
	71	2585.10	129.56	100.85	230.41
	72	2445.23	139.88	115.30	255.18
	73	2304.37	140.86	109.66	250.52
	74	2162.79	141.59	103.91	245.50
	75	2020.71	142.06	98.11	240.17
	76	1878.51	142.20	92.23	234.43
	77	1736.52	141.99	86.30	228.29
	78	1595.10	141.43	80.31	221.74
	79	1454.66	140.44	74.29	214.73
	80	1315.67	138.99	68.26	207.25

TABLE 18 (CONTINUED)
ESTIMATED CHARACTERISTICS FOR EXISTING DEBT BY REGION, TYPE OF DISTRICT AND YEAR, 1967-80
(in Millions of Current Dollars)

WEST	YEAR	DEBT OUT	DEBT RET	INTEREST	DEBT SERV
Central Cities	67	2113.88	142.75	71.05	213.80
	68	2043.87	152.01	74.15	226.16
	69	2001.99	155.89	72.58	228.47
	70	1903.28	159.80	72.52	232.32
	71	1827.22	162.07	70.79	232.86
	72	1661.83	165.38	69.46	234.84
	73	1497.01	164.82	63.48	228.30
	74	1333.20	163.82	57.49	221.31
	75	1170.91	162.29	51.53	213.82
	76	1010.68	160.23	45.61	205.84
	77	853.13	157.55	39.70	197.25
	78	698.91	154.20	33.88	188.08
	79	548.76	150.15	28.15	178.30
	80	403.47	145.28	22.51	167.79
Other SMSA	67	1949.20	131.63	65.51	197.14
	68	2005.02	140.16	68.37	208.53
	69	2128.87	149.15	72.33	221.48
	70	2113.36	161.50	79.92	241.42
	71	2150.91	167.86	83.36	251.22
	72	1973.52	177.38	87.72	265.10
	73	1795.41	178.12	80.96	259.08
	74	1616.90	178.50	74.13	252.63
	75	1438.44	178.46	67.26	245.72
	76	1260.42	178.00	60.34	238.34
	77	1083.36	177.05	53.39	230.44
	78	907.78	175.59	46.43	222.02
	79	734.28	173.51	39.46	212.97
	80	563.51	170.77	32.50	203.27
Non-SMSA	67	1603.77	108.30	53.90	162.20
	68	1602.45	115.33	56.26	171.59
	69	1639.21	122.25	57.58	179.83
	70	1592.41	131.78	61.01	192.79
	71	1575.20	136.90	61.77	198.67
	72	1430.96	144.24	63.05	207.29
	73	1286.16	144.81	57.51	202.32
	74	1141.09	145.08	51.95	197.03
	75	996.04	145.02	46.31	191.33
	76	851.42	144.62	40.65	185.27
	77	707.61	143.81	34.96	178.77
	78	565.02	142.58	29.25	171.83
	79	424.18	140.84	23.54	164.38
	80	285.58	138.58	17.84	156.42

TABLE 19

EXPENDITURES FOR NEW EQUIPMENT BY REGION AND TYPE OF DISTRICT, ESTIMATED 1967-68 AND PROJECTED 1975-76 AND 1980-81
(In Millions of 1967-68 Dollars)

	1967-68			
Region	Total	% of Instructional Expenditures	1975-76	1980-81
NORTHEAST				
Central Cities	22.6	1.4	31.7	35.4
Other SMSA	54.7	2.4	96.3	113.6
Non-SMSA	25.3	2.7	44.5	49.9
TOTAL	102.6		172.5	198.9
NORTH CENTRAL				
Central Cities	43.2	2.7	58.5	64.7
Other SMSA	79.9	4.3	146.9	173.4
Non-SMSA	82.7	4.7	122.5	132.4
TOTAL	205.8		327.9	370.5
SOUTH				
Central Cities	64.6	3.5	99.8	118.4
Other SMSA	52.5	5.0	96.5	132.1
Non-SMSA	84.2	4.2	144.1	162.6
TOTAL	201.3		340.4	413.1
WEST				
Central Cities	50.6	3.8	77.2	88.6
Other SMSA	59.8	4.1	109.9	132.6
Non-SMSA	31.0	3.4	41.1	43.8
TOTAL	141.4		228.2	265.0
All Central Cities	181.0		267.2	307.1
All Other SMSA	246.9		449.6	551.7
All Non-SMSA	223.2		352.2	388.7
TOTAL U.S.	651.1		1,069.0	1,247.5

Source: 1967-68 Regional totals based on U.S. Department of Health, Education, and Welfare, Office of Education, Statistics of State School Systems, 1967-68 (preliminary figures), U.S. Government Printing Office, Washington, D.C.; Type of district based on reanalysis of Elementary-Secondary General Information Survey (ELSEGIS), conducted by Office of Education, 1969 and 1970. Projected as per cent of Instructional Expenditures, see Section on Total Current Expenditures and Table 41.

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